


10-1-1983

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Recommended Citation

Stanley A. Martin, *Problems with PURPA: The Need for State Legislation to Encourage Cogeneration and Small Power Production*, 11 B.C. Env'tl. Aff. L. Rev. 149 (1983), <http://lawdigitalcommons.bc.edu/ealr/vol11/iss1/6>

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PROBLEMS WITH PURPA: THE NEED FOR STATE LEGISLATION TO ENCOURAGE COGENERATION AND SMALL POWER PRODUCTION

*Stanley A. Martin**

I. INTRODUCTION

In 1980, electric utilities in the United States used 5.3 trillion kilowatt-hours (KWH)¹ of energy derived from fossil fuels.² This represented an increase of 22.5 percent over the previous five years.³ Even assuming a declining rate of increase, energy consumption by electric utilities could exceed 8.4 trillion KWH by the year 2000.⁴ The electric energy *produced* by the utilities pales in comparison to the total energy consumed, as the overall fuel efficiency average⁵ of the United States utility network is 29 percent.⁶ Out of

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1. One kilowatt-hour equals 1000 watts produced for one hour. A kilowatt-hour (KwH) is equivalent to 3,409.52 British Thermal Units (BTU's), or 859,362 calories. Burning a 100-watt lightbulb for 10 hours would be equal to 1000 watt-hours, or 1 KwH. R. WEAST, HANDBOOK OF CHEMISTRY AND PHYSICS F-286 (54th ed. 1873).

2. ENERGY INFORMATION ADMINISTRATION, U.S. DEPT. OF ENERGY, Pub. No. DOE/EIA-0191(80), COST AND QUALITY OF FUELS FOR ELECTRIC UTILITY PLANTS 1980 ANNUAL 6 (1980). Fossil fuels are "[a]ny natural occurring fuel of an organic nature, such as coal, oil shale, natural gas, or crude oil." SOIL CONSERVATION SOCIETY OF AMERICA, RESOURCE CONSERVATION GLOSSARY 65 (3d ed. 1982).

3. EDISON ELECTRIC INSTITUTE, STATISTICAL YEARBOOK OF THE ELECTRIC INDUSTRY 1979 47 (1980).

4. See Uhler and Zycher, *Energy Forecasting and Its Uncertainties*, 105 PUB. UTIL. FORT. 27, 28-30, January 17, 1980. Estimates of electric energy consumption for the year 2000 range from 8.4 trillion KwH to approximately 17.7 trillion KwH. *Id.*

5. "Fuel efficiency" for the utility industry is the ratio of the value of usable energy produced in the form of electricity to the value of energy consumed by the utility in the form of raw fuels. RESEARCH PLANNING ASSOCIATES, THE POTENTIAL FOR INDUSTRIAL COGENERATION DEVELOPMENT BY 1990 iii (1981) [hereinafter cited as RPA COGENERATION REPORT].

6. Casten and Ross, *Cogeneration and its Regulation*, 107 PUB. UTIL. FORT. 18, Mar. 26, 1981.

the 5.3 trillion KWH of energy consumed by the utilities in 1980, only 2.5 trillion KWH were generated for use by the consumer.⁷

It is against this background that measures to encourage greater fuel efficiency and a decreased dependence on fossil fuels will be discussed. The potential advantages of two measures — increased industrial “cogeneration” and generation of electricity using renewable resources — are very great. Cogeneration is the use of waste heat from an industrial process for the production of electricity, or the recapture of waste heat from electricity generation for use in an industrial process.⁸ Renewable resources such as solar, wind, or hydropower energy can also be used to generate electricity. Generators using these resources, often called “small power producers”, consume little or no fossil-fuel-generated electricity while generating electricity from a renewable fuel.⁹

The development of cogenerators and small power producers has been contingent upon the development of a market for the electricity produced by such facilities. The sale of electricity to the public, which ordinarily occurs through privately and publicly owned utilities,¹⁰ is heavily regulated by federal and state agencies.¹¹ Thus, in order to

7. The remaining 2.8 trillion Kwh were used in the process of converting raw fuels to electricity, or were given off as waste heat, and not recovered.

8. For a discussion of cogeneration principles and methods see Williams, *Industrial Cogeneration*, 3 ANN. REV. ENERGY 313 (1978). One writer has estimated that with extensive use of cogeneration techniques, energy efficiencies of up to 80% are attainable. Caston, *supra* note 6, at 18. The 80% figure includes other forms of energy, such as thermal energy, being produced concurrently with electrical energy. This does not represent a jump from 29% to 80% efficiency in the production of electrical energy alone, but rather is the percentage of total energy consumed that is usable in some form.

9. “Qualifying small power production facility” is defined in the Public Utility Regulatory Policies Act of 1978 (PURPA) according to fuel use, fuel efficiency, capacity, and ownership criteria. PURPA § 1(17)(c), 16 U.S.C. § 796(17)(c) (Supp. V 1981). “Small power producer” is also a generic term within the utility industry, generally denoting a small power production facility that uses renewable resources for fuel.

Renewable resources include solar, wind, biothermal and geothermal energy, and power produced by hydroelectric facilities. Biothermal energy is produced by burning trash, refuse, or other waste products. Geothermal energy is produced by tapping the earth’s natural heat that exists several miles underground. Small power producers may need to use a small amount of externally-produced power to start up, monitor, test, or control generators fueled by renewable resources.

10. In most states, all electric power sales occur through a privately-held utility or a publicly-held (or municipal) utility. The state may or may not choose to regulate a publicly-held utility, but all other utilities would be regulated. See generally P. GARFIELD & W. LOVEJOY, PUBLIC UTILITY ECONOMICS 261 (1964) [hereinafter cited as P. GARFIELD].

11. State and federal agencies regulate sales of electricity by setting the rates at which the electricity is to be sold. State agencies are also involved with the enforcement of standards of service. Garfield, *supra* note 10, at 32. A. KAHN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 20 (1970). See *infra* text and notes at notes 299-327.

avoid the economic burdens of regulation,¹² cogenerators and small power producers must look to the utilities rather than the public as an outlet for their power. Electric utilities that are under a burden of state and/or federal regulation, however, do not always want to purchase power from an unregulated entity such as a small power producer.¹³ Utilities may view small power producers as competitors, each vying for the right to meet increasing power needs. As a result, electric utilities, which are the only reasonable outlet for the small power producers' power, have been reluctant to purchase such power at equitable rates.¹⁴

Recognizing the need to encourage cogenerators and small power producers by ensuring a market for their power, Congress passed the Public Utility Regulatory Policies Act of 1978 (PURPA).¹⁵ PURPA includes provisions which require utilities to purchase power from cogenerators and small power producers.¹⁶ These provisions have created conflicts between federal and state utility regulators,¹⁷ as the provisions represent an encroachment by the federal government upon traditional state regulatory controls.¹⁸ In the face of those conflicts, electric utilities challenged the power of the federal government to require utilities to purchase power from small power producers and cogenerators. Such challenges disrupted the implementation of provisions that encourage power production

12. See *infra* note 76.

13. Concern over possible discrimination by utilities against small power producers, with regard to buying power from and selling power to such producers, was a major factor in enacting Title II of PURPA. See, e.g., 123 CONG. REC. 32,437 (1977).

14. The argument over the rates that a utility must pay to a small power producer for electricity has engendered much of the litigation surrounding PURPA. The established rate-setting standard promulgated by the Federal Energy Regulatory Commission (FERC) was one of the major issues in *American Electric Power v. FERC*, 675 F.2d 1226, *rev'd*, (D.C. Cir. 1982) 103 S. Ct. 1921 (1983). See *infra* text at notes 244-92.

15. Pub. L. No. 95-617 (codified at 16 U.S.C. §§ 796-825r (1976 & Supp. V 1981)). For the legislative history of PURPA, see S. REP. NO. 1750, 95th Cong., 2d Sess. (1978); JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE, H.R. REP. NO. 1750, 95th Cong., 2d Sess. 63, reprinted in 1978 U.S. CODE CONG. & AD. NEWS 7797 [hereinafter cited as CONFERENCE REPORT].

16. PURPA § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981).

17. Within two years of enactment, the constitutionality of PURPA was challenged in *State of Mississippi v. FERC*, 456 U.S. 742 (1982). The petitioners challenged the imposition of federal standards upon state agencies. The *Mississippi* case is discussed in the text at notes 205-43 *infra*.

18. From the 1930's through the present, states have traditionally been the primary regulators of the utility industry, and federal restraints have generally been considered as supplementary forms of regulation. S. BREYER & P. MACAVOY, ENERGY REGULATION BY THE FEDERAL POWER COMMISSION 91 (1974) [hereinafter cited as S. BREYER].

using cogeneration or renewable resources.¹⁹ As a result, achievement of the goal of the Public Utility Regulatory Policies Act of 1978 (PURPA) — encouragement of cogeneration and small power production — has been stymied.

In an attempt to maintain support for the development of small power production, a small minority of states have enacted their own legislation similar to PURPA.²⁰ There have been no successful challenges to such state legislation. Furthermore, state-ordered programs do not involve the issues of preemption and federalism which may arise when federal legislation is directed toward state agencies.²¹ Given the problems of implementation of federal programs for utility regulation, state legislation may be necessary in order to encourage greater efficiency in electric power production and continued development of generators that use renewable resources. The states may be able to exert more effective control over their regulatory agencies, and may thus be the most practical forum in which to promote policies for developing cogeneration and small power production.

This article will focus on recent federal and state legislation designed to encourage electric utilities to cooperate in reducing fossil fuel dependency, and the problems that have arisen in procuring the utilities' compliance. First, the interrelationship of federal and state regulation of utilities prior to the passage of PURPA will be examined in order to provide a context for evaluating PURPA. A discussion of PURPA's provisions will follow, focusing on the goals and policies stated by Congress and the specific measures designed to achieve those goals. Third, the regulatory structure controlling electric utilities will be analyzed in light of the federal/state tensions and conflicts over utility regulation. The resulting ability of utilities to avoid complying with the PURPA provisions which promote the development of cogenerators and small power producers will be discussed. Then, the article will examine legislative action that has been taken by a number of states in this area to demonstrate how some states have provided incentives for cogeneration and small power production, and how they have given additional support to the state public utility commissions for implementing those incentives. Finally, state legislative proposals will be analyzed in terms of their ability to remove existing ambiguities in state regulatory authority or to

19. See *infra* text at notes 205-43.

20. See *infra* text and notes at notes 364-89.

21. For discussion of preemption and the *Mississippi* case, see *infra* text at notes 205-43.

provide incentives to electric utilities to cooperate in reducing fossil fuel dependence and increasing the efficiency of electric energy generation.

II. UTILITY REGULATION BEFORE PURPA

From the time of the emergence of power utility companies in the 1800's through the early 1900's, utility regulation occurred only at the state and local levels.²² Utility regulation then, as now, involved a few basic characteristics. An electric utility is allowed to monopolize service over a particular area, and in return must submit to regulation by the government.²³ State regulation of a utility generally involves establishing standards of service,²⁴ setting the rates that a utility will charge for power,²⁵ and establishing and monitoring the amount of return that utility owners will be allowed on their investment.²⁶ In carrying out these tasks, state public utility commissions have necessarily maintained a large amount of contact with each utility under their jurisdiction while monitoring the utilities' activity.²⁷

The first assertion of federal control over utility regulation came in 1920, with the passage of the Federal Water Power Act (FWPA).²⁸ The Federal Water Power Act established the Federal Power Commission (FPC),²⁹ which was entrusted primarily with regulating federal hydropower projects.³⁰ At the time of the FWPA, federal regulatory jurisdiction did not extend to the regulation of electric utilities.³¹ The first major change in this policy came with the Supreme Court decision in *Public Utilities Commission v.*

22. S. BREYER, *supra* note 18, at 91.

23. Utilities often need to make very heavy capital investments in order to provide the particular services. Due to these extensive capital requirements, such a "natural monopoly" is a much more economically efficient way of providing the service than is allowing several utilities to compete within the same area. P. GARFIELD, *supra* note 10, at 16-26. See generally A. KAHN, *supra* note 11, at 11-12.

24. D. ZILMAN & L. LATTMAN, *ENERGY LAW* 135-36 (1982).

25. *Id.*

26. *Id.*

27. The development of a regulatory system based upon local supervision of utility actions has resulted in large variations from one state to another in utility regulation. For a brief exposition of the nature and amount of regular contact between public utility commission and utility, see D. ANDERSON, *REGULATORY POLITICS AND ELECTRIC UTILITIES* 62-68 (1981).

28. Chapter 285, 41 Stat. 1063 (1920) (codified as amended at 16 U.S.C. §§ 791-825 (1982)).

29. Chapter 285 § 1, 41 Stat. 1063 (1920) (repealed).

30. See *id.* The FWPA granted federal jurisdiction only over hydropower projects.

31. See *id.*

Attleboro.³² In that case, a Rhode Island electric utility had contracted with the town of Attleboro, Massachusetts, to deliver electricity. The utility subsequently requested and received a rate increase from the Rhode Island Public Utilities Commission.³³ The Town of Attleboro objected, and appealed the decision to the Rhode Island Supreme Court.³⁴ The Rhode Island court reversed the Commission, overruling the rate increase,³⁵ and the Commission appealed to the U.S. Supreme Court.³⁶ The Supreme Court upheld the Rhode Island court, finding that the rate increase amounted to a direct burden on interstate commerce.³⁷ Furthermore, the Court stated that the rate was "not subject to regulation by either of the two States . . . ; but, if such regulation is required it can only be attained by the exercise of the power vested in Congress."³⁸

At the time of the *Attleboro* decision, the Federal Water Power Act did not include the regulation of interstate electric rates.³⁹ Thus, the Supreme Court ruling that a state agency could not regulate interstate electric rates resulted in the so-called "Attleboro gap", until Congress responded by amending the FWPA and giving to the FPC the power to regulate electric utility companies engaged in interstate commerce.⁴⁰ The Federal Power Act of 1935 (FPA),⁴¹ which

32. 273 U.S. 83 (1927).

33. *Id.* at 85-86. The utility had approached the Rhode Island Commission with a new schedule of rates. Due to certain requirements of the new schedule, Attleboro was the only customer to which the schedule would apply. *Id.* at 85 n.2.

34. Public Utilities Commission v. Attleboro, 46 R.I. 496 (1925).

35. *Id.*

36. 269 U.S. 546 (1925).

37. 273 U.S. at 90. In ruling on the Rhode Island commission's ability to regulate the rates in question, the Court stated "the test of the validity of a state regulation is not the character of the general business of the company, but whether the particular business which is regulated is essentially local or national in character." *Id.*

38. *Id.* The Court held that the state commission could not regulate the rates for electricity sold across the state line as "the paramount interest in the interstate business carried on between [the utility and Attleboro] . . . is essentially national in character." *Id.*

39. The original Federal Water Power Act consisted primarily of provisions relating to regulation of water power and development of water resources. Title II of the Public Utility Act of 1935 (often referred to as the Federal Power Act of 1935), ch. 687, 49 Stat. 838 (codified in scattered sections of U.S.C.), amended the FWPA. The original Act became subchapter I of the amended version, subsequently called the Federal Power Act.

40. The Federal Power Act of 1935 gave the FPC the power to regulate electric utility companies engaged in interstate commerce, 16 U.S.C. § 824 (1976 & Supp. V 1981). This section was later held to include regulation of wholesale electric rates, Federal Power Commission v. Southern California Edison Co., 376 U.S. 205 (1964), even when such rates were intrastate. Arkansas Power and Light Company v. Federal Power Commission, 368 F.2d 376 (5th Cir. 1966).

41. See *supra* note 39.

amended the FWPA, left to the states those powers not specifically set forth in the Act.⁴² The Federal Power Act was amended on several occasions between 1935 and 1978, when PURPA was enacted. Before PURPA, the FPA was aimed only at granting authority or issuing directives to a federal agency.⁴³ Only upon passage of PURPA did the FPA impose federal directives upon state agencies.⁴⁴

In 1977, largely in response to the 1974 OPEC oil embargo and energy crisis, Congress enacted the Department of Energy Organization Act.⁴⁵ In Title IV of the Act, the Federal Energy Regulatory Commission was established,⁴⁶ replacing the Federal Power Commission. FERC was granted several powers formerly held by the Federal Power Commission,⁴⁷ including those powers concerning the regulation of electric utilities.⁴⁸

As late as 1970, only a very small percentage of electric power was transmitted across state lines.⁴⁹ The direct control of the FPC therefore has not been as broad as would appear, and the bulk of authority and regulation continue at the state level.⁵⁰ Regulation of electric utilities and electric power rates by the FPC, and now the FERC, was, and still is, generally regarded as supplementary to utility and rate regulation by the states.⁵¹

The federal Commission's efforts in the last twenty years have focused on broader policy issues in electric utility regulation; protecting consumer interests,⁵² increasing economic efficiency of the utility industry,⁵³ seeking quality services,⁵⁴ coordinating power plan-

42. 16 U.S.C. § 824(a) (1976).

43. 16 U.S.C. §§ 791-825r (1976).

44. PURPA Title I (codified at 16 U.S.C. §§ 2601-2634 (Supp. V 1981)) and Title II (codified at 16 U.S.C. §§ 796-825r (Supp. V 1981)) both require state agencies to "consider" certain federal standards in establishing rates for electric power.

45. Pub. L. No. 95-91, 91 Stat. 565 (1977) (codified in scattered sections of 42 U.S.C.).

46. Title IV § 401, 42 U.S.C. § 7171 (Supp. IV 1980).

47. *Id.* § 402, 42 U.S.C. § 7172 (Supp. IV 1980).

48. *Id.* § 402(a)(1)(B), 42 U.S.C. § 7172(a)(1)(B) (Supp. IV 1980).

49. In 1970, interstate electric power transmission represented only 7.3 percent of the total U.S. power transmission. S. BREYER, *supra* note 18, at 11.

50. *See generally id.*

51. *Id.* at 91.

52. *Id.* at 1-2. The FPC has acted to voice concerns of some consumer interest groups in dealing with the utilities. *Id.*

53. *Id.* at 3. The FPC entered planning and forecasting activities of the utility industry with the intent of increasing production and reducing costs. *Id.* at 1-2.

54. *Id.* at 12. The FPC has acted to require larger producers of electric power to sell to smaller retailers in an attempt to insure a more consistent power source for the smaller retailers. *Id.*

ning,⁵⁵ and encouraging interconnections between electric utilities and power pooling.⁵⁶ Thus, the Commission's involvement prior to PURPA did not impinge directly on state regulatory agencies.

With the enactment of PURPA in 1978, Congress appeared to go beyond the previous scope and nature of federal control over public utility regulation. Specifically, the provisions in PURPA directing state regulatory agencies to consider specific federal standards⁵⁷ went beyond the previous scope of the Federal Power Act. The manner in which PURPA expanded federal control affected the acceptance of PURPA by the states due to the changes in state authority and procedures regarding utility regulation mandated by PURPA. Provisions of PURPA established new standards and methods for state public utility commissions to implement in order to encourage cogeneration and small power production.

III. THE PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978

In 1978, Congress enacted the National Energy Act (NEA).⁵⁸ Comprised of five separate Acts,⁵⁹ the NEA established an extensive program to promote a comprehensive national energy policy.⁶⁰ Two

55. *Id.* at 92. Especially through the 1960's, the Commission strongly encouraged utilities to cooperate in planning their future needs and capacities. The Commission hoped to even out inconsistencies in service between areas with different power needs. *See id.*

56. *Id.* at 91-99. Interconnection between utilities is considered a safety measure, as it allows adjoining utilities to compensate for sudden localized loss of power. Power pooling generally involves three steps:

- (1) interconnection of generating systems;
- (2) coordinated production for transmission reliability; and
- (3) centralized dispatching control.

Interconnection between utilities can lower the total amount of reserve capacity needed for sudden fluctuations, and thus lower overall costs. Coordinated power planning can reduce social costs by involving different forms of energy sources over a given area. Thus, a particular area may be able to rely, if necessary, on power produced in another area using another raw fuel. For example, in 1976 several Midwest states were adversely affected by an extended coal strike, which significantly reduced the amount of coal available to produce electricity. The existence of a more extensive power pool could have mitigated the effect, where surrounding states were not heavily dependent upon coal-powered electricity.

57. *See infra* text at notes 181-89.

58. For a summary of the NEA legislative history, *see* H.R. REP. NO. 543, 95th Cong., 2d Sess. 3, reprinted in 1978 U.S. CODE CONG. & AD. NEWS 7673 [hereinafter cited as H.R. REP. NO. 543]. *See also* President's comments upon signing National Energy Bills, 1978 PUB. PAPERS 1978, 1979 (Nov. 9, 1978).

59. Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617; Energy Tax Act of 1978, Pub. L. No. 95-618; National Energy Conservation Policy Act, Pub. L. No. 95-619; Powerplant and Industrial Fuel Use Act of 1978, Pub. L. No. 95-620; Natural Gas Policy Act of 1978, Pub. L. No. 95-621, 1978 PUB. PAPERS 1985.

60. *See* H.R. REP. NO. 543, *supra* note 58, at 3.

of the principal goals of the NEA were energy conservation and decreased dependence on imported oil.⁶¹ As one of the five Acts comprising the NEA, the Public Utility Regulatory Policies Act (PURPA) plays an important role in reaching those goals. PURPA is designed to increase the use of renewable resources to meet the ever-increasing need for electric power generation and encourage the use of cogeneration for more efficient energy production.⁶²

A. Provisions of PURPA

The PURPA provisions designed to encourage efficient electricity generation and the use of renewable resources focus on incentives for the development of cogeneration and small power production facilities.⁶³ In order to encourage cogenerators and small power producers, Congress recognized the need to ensure a market for power produced by those facilities.⁶⁴ Toward that end, PURPA requires that utilities interconnect with cogenerators and small power producers that meet certain qualifications for the purpose of purchasing electric power.⁶⁵ PURPA also establishes standards for determining the rates that a utility must pay for such power. Additionally, PURPA requires that state utility commissions exempt from regulation those cogenerators and small power producers that meet federally-prescribed statutory qualifications.⁶⁶ PURPA delegated to the Federal Energy Regulatory Commission (FERC) authority to promulgate regulations with regard to small power production and cogeneration.⁶⁷

1. Qualification Standards

PURPA amended portions of the Federal Power Act,⁶⁸ and added new sections to the Act. PURPA section 210,⁶⁹ for example, added new provisions directing the Federal Energy Regulatory Commission to prescribe rules to be followed by state regulatory agencies

61. *Id.* at 9, reprinted in 1978 U.S. CODE CONG. & AD. NEWS 7678.

62. CONFERENCE REPORT, *supra* note 15, at 7798-7800.

63. PURPA § 210, 16 U.S.C. § 824a-3 (Supp. V 1981).

64. Lock and Van Kuiken, *Cogeneration and Small Power Production: State Implementation of Section 210 of PURPA*, 3 SOLAR L. REP. 659, 661 (1981).

65. PURPA § 202, 16 U.S.C. § 824i (Supp. V 1981).

66. *Id.* § 210(e), 16 U.S.C. § 824a-3(e) (Supp. V 1981).

67. *Id.* § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981).

68. *See supra* notes 39-40.

69. 16 U.S.C. §§ 824, 824a-3 (1976 & Supp. V 1981).

and by non-regulated utilities,⁷⁰ “to encourage cogeneration and small power production [of electricity].”⁷¹ There are three essential elements of section 210 which apply only to qualified⁷² facilities. The first requires FERC to establish rules which would require electric utilities to sell electric power to⁷³ and purchase electric power from⁷⁴ qualifying cogeneration and small power production facilities. The second contains provisions which require FERC to set standards for determining the rates for electric power sold by those qualifying facilities.⁷⁵ The third element requires the exemption of cogenerators and small power producers from regulation by state agencies.⁷⁶

Section 201⁷⁷ of PURPA sets forth qualifying criteria for cogenerators and small power producers. Qualifying criteria include: specifications of the “primary energy source”⁷⁸ allowable for small power producers;⁷⁹ maximum generating output;⁸⁰ restriction on

70. A nonregulated electric utility is one that is not subject to regulation by a state regulatory agency under the laws of that state. Utilities owned by municipalities or by publicly-held corporations, for example, may be nonregulated utilities. See P. GARFIELD, *supra* note 10, at 261. Such utilities are still subject to the provisions of PURPA § 210, but are not discussed here.

71. 16 U.S.C. § 824a-3(a) (Supp. V 1981). The rules were to be issued only after FERC had given public notice and had allowed interested parties an opportunity to comment. The Commission was to consult with representatives of state and federal regulatory agencies having ratemaking authority over electric utilities, and was to allow those representatives to submit written data, views, and arguments. *Id.*

72. “Qualified” facilities are those cogeneration and small power production facilities that meet the standards of PURPA § 201, 16 U.S.C. § 796 (Supp. V 1981).

73. 16 U.S.C. § 824a-3(a)(1) (Supp. V 1981). The standards of the rates for sale to qualifying facilities, as promulgated by FERC, were to be; “(1) just and reasonable and in the public interest, and (2) [nondiscriminatory] against the qualifying cogenerators or qualifying small power producers.” *Id.* § 824a-3(c).

74. *Id.* § 824a-3(a). For a discussion of the standards for the purchase rates, see *infra* text at notes 124-36.

75. 16 U.S.C. § 824a-3(b) (Supp. V 1981). See *infra* text and notes at notes 124-30.

76. 16 U.S.C. § 824a-3(e) (Supp. V 1981). One of the major barriers to cogenerators and small power producers prior to PURPA was the risk of being considered a public utility, and therefore subject to extensive regulatory requirements under a state public utility commission (PUC). The intent of Congress was to remove this barrier for facilities meeting the standards discussed *infra* text at notes 77-88. See CONFERENCE REPORT, *supra* note 15, at 7831-32.

77. 16 U.S.C. § 796(17)-(22) (Supp. V 1981).

78. The “primary energy source” is the fuel or fuels used for generation of electricity, except that auxiliary fuels used for ignition, testing, or control are not considered. PURPA § 201(17)(B), 16 U.S.C. § 796(17)(B) (Supp. V 1981).

79. Energy sources allowable for small power producers are: biomass, waste (production of electricity by burning), renewable (*e.g.*, wind and solar), and geothermal sources. *Id.* § 201(17)(A), 16 U.S.C. § 796(17)(A) (Supp. V 1981).

80. In order to qualify under § 201, a small power producer must have a maximum output of 80 mega-watts (MW) of electricity (one mega-watt equals one million watts). *Id.* § 201(17)(A)(ii), 16 U.S.C. § 796(17)(A)(ii) (Supp. V 1981). Furthermore, a small power producer

ownership of the facility to "a person not primarily engaged in the generation or sale of electric power,"⁸¹ and, for cogeneration facilities only, the requirement that the facility produce electric energy and another form of useful energy concurrently.⁸² Section 201 also orders FERC to prescribe standards for fuel use,⁸³ fuel efficiency,⁸⁴ minimum size,⁸⁵ and reliability of service⁸⁶ to be met by cogenerators and small power producers in order to qualify for exemption from regulation. Facilities meeting these various criteria are designated "qualifying facilities."

2. Exemption Provisions

Congress deemed that exemption from the type and extent of regulation ordinarily imposed upon any utility selling power is necessary in order to encourage the production and sale of electricity by cogenerators and small power producers.⁸⁷ PURPA section 210 requires the Federal Energy Regulatory Commission to prescribe rules exempting qualifying facilities from regulation by federal or state regulatory commissions. Section 210(e) provides that the rules exempt such facilities "in whole or in part" if FERC finds that such exemption is "necessary to encourage cogeneration and small power production."⁸⁸

Congress, in section 210(e),⁸⁹ also ordered FERC to prescribe rules exempting qualifying facilities⁹⁰ from the Federal Power Act

with an energy source other than geothermal or biomass may not be exempt from all regulation if maximum output is over 30 MW. *Id.* § 210(e)(2), 16 U.S.C. 824a-3(e)(2) (Supp. V 1981).

81. PURPA § 201(17)(C)(ii), 16 U.S.C. § 796(17)(C)(ii) (Supp. V 1981). This definition does not include the sale of power by a qualifying facility.

82. A qualifying facility must produce "(i) electric energy, and (ii) steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes." *Id.* § 201(18)(A), 16 U.S.C. § 796(18)(A) (Supp. V 1981).

83. 16 U.S.C. § 796(17)(C)(i) (Supp. V 1981). Fuel use standards establish the types of raw fuels permissible for qualified facilities.

84. 16 U.S.C. § 796(18)(B)(i) (Supp. V 1981). Fuel efficiency standards set forth the allowable ratio of energy input to energy output for qualified facilities.

85. *Id.*

86. *Id.* § 796(17)(C)(i).

87. *See supra* note 76.

88. PURPA § 210(e)(1), 16 U.S.C. § 824a-3(e)(1) (Supp. V 1981).

89. 16 U.S.C. § 824a-3(e) (Supp. V 1981).

90. Qualification for exemption under this subsection is more restricted than for the rest of the section. A small power producer with power production capacity over 30 MW, or a small power producer using geothermal energy with capacity over 80 MW, may not be exempted by the FERC rules from Federal Power Act jurisdiction. The Commission must then set the rates

(FPA),⁹¹ the Public Utility Holding Company Act,⁹² and state laws governing rates or other regulation of electric utilities. The Commission, however, may not prescribe rules exempting qualifying facilities from state laws or regulations implementing the provisions of PURPA,⁹³ from any license or permit requirement under the Federal Power Act,⁹⁴ or from the PURPA provisions concerning "interconnection"⁹⁵ and "wheeling."⁹⁶ Cogenerators and small power producers are not exempt from these provisions because the provisions require those qualifying facilities to share with a utility the costs of interconnection and wheeling.⁹⁷

3. Interconnection and Wheeling Provisions

Section 202⁹⁸ of PURPA deals with interconnection, which is the physical connection necessary for electricity transfer. "Wheeling" of power, which is the transfer of electric power from its source to another utility's lines, is covered by section 211.⁹⁹ Section 202 grants the Federal Energy Regulatory Commission authority to order a utility to interconnect with a qualifying cogenerator, small power producer, or geothermal power producer.¹⁰⁰ The Commission may order such interconnection upon a motion by an affected utility or qualifying facility,¹⁰¹ upon application by the state regulatory authority,¹⁰² or upon its own motion.¹⁰³ Subsequent to issuing notice

for the sale of power by such a facility according to the provisions of the Federal Power Act. *Id.* § 824a-3(e)(2). See CONFERENCE REPORT, *supra* note 15, at 7833.

91. Codified as amended at 16 U.S.C. §§ 791-825r (1976 & Supp. V 1981). The FPA has jurisdiction over electricity sold interstate, and over all wholesale electric power transactions. 16 U.S.C. § 824 (Supp. V 1981).

92. Chapter 687, Title I, 49 Stat. 803 (1935) (current version at 15 U.S.C. §§ 79-79z-6 (1976 & Supp. V 1981)).

93. 16 U.S.C. § 824a-3(e)(3)(A) (Supp. V 1981).

94. *Id.* § 824a-3(e)(3)(C).

95. Interconnection is discussed *infra* text and notes at notes 98-123.

96. Wheeling is discussed *infra* text and notes at notes 107-123.

97. PURPA § 210(e)(3)(B), 16 U.S.C. § 824a-3(e)(3)(B) (Supp. V 1981).

98. 16 U.S.C. § 824i (Supp. V 1981).

99. *Id.* § 824j.

100. *Id.* § 824i(a).

101. *Id.* § 824i(a)(1).

102. *Id.* § 824i(a)(2).

103. *Id.* § 824i(d). FERC may on its own motion issue an order concerning interconnection and wheeling consistent with the statutory guidelines, except for orders with respect to a federal power marketing agency (such as the Tennessee Valley Authority), which may only be issued upon application by an affected party. *Id.* § 824i(a)(2). If FERC does not issue upon application an interconnection or wheeling order, it is required to deny the application. *Id.* § 824k(d).

to each affected utility and to the public, FERC must hold a hearing on the issue of ordering a connection between the utility and the qualifying facility for the purpose of selling or exchanging electricity.¹⁰⁴ Section 202 requires that an interconnection order issued by FERC be “in the public interest,”¹⁰⁵ and that it “(A) encourage overall conservation of energy or capital, (B) optimize the efficiency of use of facilities and resources, or (C) improve the reliability of any electric utility system . . . to which the order applies.”¹⁰⁶

Section 203¹⁰⁷ of PURPA deals with wheeling of electricity. “Wheeling” is the transfer of electricity by a utility from the producer of the electricity to another utility that is buying the power from the producer. If the producer is not within the area of service of the purchasing utility, FERC may order a utility between the producer and purchaser to wheel, or transfer, the power to the purchaser.¹⁰⁸ To issue an order for wheeling, FERC must determine that such order:

- (1) is in the public interest,
- (2) would — (A) conserve a significant amount of energy, (B) significantly promote the efficient use of facilities and resources, or (C) improve the reliability of any electric system to which the order applies, and
- (3) meets the requirements of [PURPA section 204].¹⁰⁹

In addition, a wheeling order may be issued only if FERC determines that it “would reasonably preserve existing competitive relationships,”¹¹⁰ would not result in the utility wheeling power that would replace what that utility would otherwise sell,¹¹¹ would not be inconsistent with existing state laws,¹¹² or would not provide transmission directly to an ultimate consumer.¹¹³

104. *Id.* § 824i(b). Subsequent to a hearing, FERC may order the actual physical interconnection, and may also order either party to take steps to make such a connection effective, *e.g.*, increase transmission capacity or install safeguards to maintain reliability of the interconnection. *Id.* § 824a-3(a)(1)(A-D).

105. *Id.* § 824i(c)(1).

106. *Id.* § 824i(c)(2).

107. 16 U.S.C. § 824j (Supp. V 1981).

108. *Id.* § 824j(a). An application for wheeling may be brought only by a utility, a geothermal power producer, or a federal power marketing agency. FERC may not issue a wheeling order upon its own motion. *Id.*

109. PURPA § 203(a), 16 U.S.C. § 824j(a) (Supp. V 1981).

110. *Id.* § 203(c)(1), 16 U.S.C. § 824j(c)(1).

111. *Id.* § 203(c)(2), 16 U.S.C. § 824j(c)(2).

112. *Id.* § 203(c)(3), 16 U.S.C. § 824j(c)(3).

113. *Id.* § 203(c)(4), 16 U.S.C. § 824j(c)(4).

An order by FERC under section 202 must also meet the requirements of section 204 of PURPA.¹¹⁴ Section 204¹¹⁵ allows FERC to issue an order regarding interconnection or wheeling only if it will not likely result in an uncompensated economic loss¹¹⁶ or an undue burden¹¹⁷ on either party, or if it will not impair the reliability of the utility,¹¹⁸ or its ability to adequately serve its customers.¹¹⁹

Section 204 also states that FERC may not order any interconnection or wheeling unless the applicant for the order (typically, the qualifying facility) demonstrates that it is "ready, willing, and able to reimburse the party subject to the order . . ." (typically, the utility) for its share of interconnection costs and for the reasonable costs of wheeling power.¹²⁰ Before issuing a final order for interconnection or wheeling, FERC must issue a proposed order¹²¹ and allow the parties a reasonable time to reach an agreement on their own regarding the terms and conditions of the order.¹²² All agreed upon terms and conditions are subject to review by FERC.¹²³

4. Rate-Setting Provisions

Section 210 requires FERC to prescribe rules for setting the rates that electric utilities must pay to qualifying facilities.¹²⁴ The rules are to ensure that the rates will be "just and reasonable to the consumers of the electric utility and in the public interest"¹²⁵ and "not discrimina[tory] against qualifying cogenerators or qualifying small power producers."¹²⁶ One other restriction included is that "[n]o such rule . . . shall provide for a rate which *exceeds the incremental cost* to the electric utility of alternative electric energy."¹²⁷ Section

114. 16 U.S.C. § 824i(c)(3) (Supp. V 1981).

115. 16 U.S.C. § 824k (Supp. V 1981). This section applies both to interconnection and wheeling orders by FERC.

116. *Id.* § 824k(a)(1).

117. *Id.* § 824k(a)(2).

118. *Id.* § 824k(a)(3).

119. *Id.* § 824k(a)(4).

120. *Id.* § 824k(b).

121. *Id.* § 824k(c)(1).

122. *Id.* The proposed order is not enforceable in court. *Id.*

123. *Id.* It is Congress' intent that FERC not disapprove terms or conditions agreed to between parties unless those terms or conditions may be detrimental to the taxpayer or inconsistent with PURPA §§ 202-204, 16 U.S.C. §§ 824i-824k (Supp. V 1981). CONFERENCE REPORT, *supra* note 15, at 7828.

124. 16 U.S.C. § 824a-3(b) (Supp. V 1981).

125. *Id.* § 824a-3(b)(1).

126. *Id.* § 824a-3(b)(2).

127. *Id.* § 824a-3(b) (emphasis added). This requirement reflects Congress' desire to en-

210 then defines "incremental cost" as "the cost to the electric utility which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source."¹²⁸ The Conference Report mentioned several times that qualifying facilities should not be burdened by the same type of regulation imposed upon utilities.¹²⁹ By providing for a rate structure based on the utilities' cost of operation rather than the costs of the qualifying facility, Congress was allowing qualifying facilities to avoid extensive regulatory scrutiny.¹³⁰

In PURPA section 210(f)¹³¹ Congress required that the state regulatory agencies—usually a state public utility commission in each state—implement, after notice and an opportunity for hearing, the rules promulgated by FERC.¹³² In so doing, PURPA did not expand the jurisdiction of any state public utility commission since the state commissions were ordered to enforce the PURPA provisions only upon those utilities already under their control.¹³³

courage cogeneration and small power production while protecting the interests of the electric consumer. See CONFERENCE REPORT, *supra* note 15, at 7831-32. A rate payable to a qualifying facility that exceeded the incremental cost could result in greater overall cost to the consumer. See *infra* note 128.

128. 16 U.S.C. § 824a-3(d) (Supp. V 1981). "Incremental cost" is sometimes called "avoided cost," or is referred to as a "marginal rate." Generally, the base load of a utility is met by large generating units using lower-cost fuels such as coal. Smaller generating units, fired up only as needed to meet higher load requirements, use more expensive fuels such as oil or gas. The incremental cost is based on the last units to be fired up by the utility — called "peaking units" — so that the power produced by a qualifying facility is considered to be replacing the most expensive power produced by the utility. Therefore, if a utility is required to pay 100% of incremental cost to a qualifying facility, then during periods of low demand when peaking units are not operating, the utility may pay more for power from the qualifying facility than what it would cost the utility to produce the power itself. See generally, A. KAHN, *supra* note 11, at 63-83.

129. CONFERENCE REPORT, *supra* note 15, at 7831-32.

130. *Id.* at 7831. Congress also recognized that the qualifying facilities would not have a guaranteed rate of return, as do utilities, and would be assuming greater risks than utilities encounter. *Id.* at 7831-32. A second issue regarding rate determination is the amount of weight to be given competing standards by the utility commission.

The standard that rates be "just and reasonable . . . and in the public interest," 16 U.S.C. § 824a-3(b)(1) (Supp. V 1981), calls for a lower rate to be paid to a qualifying facility, so that the prices for the electric consumer may be kept down. However, the encouragement of cogeneration and small power production, in order to ultimately reduce dependence on fossil fuels, may necessitate paying rates to qualifying facilities that would result in increased costs to the electric consumer. While the overall policies of the energy acts were clearly spelled out, see *supra* text and notes at notes 58-61, there was no direction given FERC as to balancing those policies with the requirement of "just and reasonable" rates.

131. 16 U.S.C. § 824a-3(f) (Supp. V 1981).

132. *Id.* § 824a-3(f)(1).

133. *Id.* A public utility commission might not have authority over a municipal utility or one exempted from state control by state legislation.

Section 210 of PURPA gives the Federal Energy Regulatory Commission the power to enforce its rules made pursuant to PURPA with respect to any utility or qualifying facility subject to FERC jurisdiction.¹³⁴ The Commission also has the power to force state regulatory agencies to comply with the FERC regulations under PURPA.¹³⁵ This power to enforce adoption of the PURPA provisions, however, is the sole extent of FERC's authority over state regulatory agencies.¹³⁶

B. Federal Regulatory Action Under PURPA

After the passage of PURPA, the Federal Energy Regulatory Commission promulgated regulations with regard to cogeneration and small power production facilities.¹³⁷ These regulations prescribe arrangements between electric utilities and qualifying facilities for interconnection, wheeling, and purchase and sale rates of electric power.¹³⁸

The basic obligations imposed upon the utilities by FERC include: the obligation to purchase power from qualifying facilities;¹³⁹ the obligation to sell power to qualifying facilities;¹⁴⁰ the obligation to interconnect with those facilities for the purpose of purchasing and selling power;¹⁴¹ the obligation to wheel electric power from the qualifying facility to another utility;¹⁴² and the obligation to offer to

134. PURPA § 210(h), 16 U.S.C. § 824a-3(h) (Supp. V 1981).

135. *Id.* § 824a-3(h)(2). FERC may bring an enforcement action on its own, *id.* § 824a-3(h)(2)(A), or upon petition by a utility or qualifying facility, *id.* § 824a-3(h)(2)(B). Any utility or qualifying facility may petition FERC to enforce the FERC regulations and, if FERC fails to act within 60 days of such petition, may initiate an action for enforcement of the FERC regulations. *Id.*

136. *Id.* § 824a-3(h)(2)(A):

No enforcement action may be brought by the Commission [FERC] under this section other than -

(i) an action against the state regulatory authority . . . for failure to comply with the requirements of subsection (f) of this section [requiring state regulatory agencies to implement the FERC rules]

137. 18 C.F.R. §§ 292.101-292.602 (1982). For an explanation of the FERC regulations in Part 292, see 45 Fed. Reg. 12,233, 17,959 (1980).

138. 18 C.F.R. §§ 292.301-292.308 (1982).

139. 18 C.F.R. § 292.303(a): "Each electric utility shall purchase [at rates determined under § 292.304], any energy and capacity which is made available from a qualifying facility."

140. 18 C.F.R. § 292.303(b) (1982). The rates for sales are to be "just and reasonable and in the public interest," *id.* § 292.305(a)(1)(i), and nondiscriminatory, *id.* § 292.305(a)(1)(ii). The intent is that the qualifying facility pay the same rate as would a consumer in the same class with the same power demand characteristics, 45 Fed. Reg. 12,228 (1982).

141. 18 C.F.R. § 292.303(c) (1982). The qualifying facility might have to share the costs of the interconnection. *Id.* § 292.306.

142. 18 C.F.R. § 292.303(d) (1982).

operate in parallel with the qualifying facility ("simultaneous transaction" rule).¹⁴³ General requirements for small power production facilities include maximum power output,¹⁴⁴ fuel use,¹⁴⁵ and ownership criteria.¹⁴⁶

The scope of the FERC rules respecting purchases and sales of electric power between qualifying facilities and utilities does not preclude the parties from negotiating their own agreements¹⁴⁷ or invalidate any existing contract between those parties.¹⁴⁸ The FERC rules, however, do establish a framework for electric power sales by qualifying facilities¹⁴⁹ and require state public utility commissions to implement the FERC rules.¹⁵⁰

143. 18 C.F.R. § 292.303(e) (1982). Under a "simultaneous transaction", the qualifying facility is deemed to be selling all the power it produces to the utility, and purchasing all the power it needs from the utility. The amount payable by either party depends on the difference in electricity produced times the applicable rate and electricity purchased times the applicable rate.

144. 18 C.F.R. § 292.203(a)(1) (1982). "The power production capacity of the facility for which qualification is sought, together with the capacity of any other facilities which use the same energy resource, are owned by the same person, and are located at the same site, may not exceed 80 megawatts." *Id.* § 292.204(a).

145. 18 C.F.R. § 292.203(a)(2) (1982). The primary energy source of the facility must be biomass, waste, renewable resources, or any combination thereof, and 75% or more of the total energy input must be from these sources. *Id.* § 292.204(b)(1)(i).

146. 18 C.F.R. § 292.203(a)(3) (1982):

General Rule

(a) A cogeneration facility or small power production facility may not be owned by a person primarily engaged in the generation or sale of electric power (other than electric power solely from cogeneration facilities or small power production facilities).

(b) Ownership Test. For purposes of this section, a cogeneration or small power production facility shall be considered to be owned by a person primarily engaged in the generation or sale of electric power, if more than 50 percent of the equity interest in the facility is held by an electric utility or utilities, or by an electric utility holding company, or companies, or any combination thereof.

Id. § 292.206(a)-(b). This provision precludes utilities from gaining controlling interest in a qualifying facility.

147. 18 C.F.R. § 292.301(b)(1) (1982):

Nothing in this subpart:

(1) Limits the authority of any electric utility or any qualifying facility to agree to a rate for any purchase, or terms or conditions relating to any purchase, which differ from the rate or terms or conditions which would otherwise be required by this subpart.

See infra note 390.

148. *Id.* § 292.301(b)(2): "Nothing in this subpart . . . (2) Affects the validity of any contract entered into between a qualifying facility and an electric utility for any purchase."

149. *Id.* § 292.304.

150. *Id.* § 292.401(a):

Not later than one year after these rules take effect, each State regulatory authority shall, after notice and an opportunity for public hearing, commence implementation of Subpart C [rules respecting arrangements between utilities and qualifying facili-

The Federal Energy Regulatory Commission also established standards by which a state public utility commission could determine the rate payable to a qualifying facility for power.¹⁵¹ The regulations provide that the standards of PURPA section 210(b)¹⁵² will be met if, after considering the capacity of both the utility and the qualifying facility and the ability of the utility to defer costs by relying on the qualifying facility's power,¹⁵³ the public utility commission establishes a rate equal to the utility's avoided costs.¹⁵⁴ The Commission indicated that a state public utility commission could establish a rate less than full avoided cost if it found such a rate to be consistent with the provisions of PURPA section 210(b) and "sufficient to encourage cogeneration and small power production."¹⁵⁵ The Commission made it clear, however, that it preferred that rates be set at the maximum allowable level under PURPA section 210(b).¹⁵⁶ This position met with resistance in both the utility and regulatory industries,¹⁵⁷ and a challenge to the FERC's standards was soon brought by the American Electric Power Corporation.¹⁵⁸

ties] Such implementation may consist of the issuance of regulations, an undertaking to resolve disputes between qualifying facilities and electric utilities arising under Subpart C, or any other action reasonably designed to implement such subpart

. . . .

151. *Id.* § 292.304.

152. 16 U.S.C. § 824a-3(b) (Supp. V 1981). The standards of 18 C.F.R. § 292.304(a) (1982) repeat the standards set out in 16 U.S.C. § 824a-3(b) (Supp. V 1981). *See supra* text at notes 124-127.

153. *See supra* note 125. The FERC rules in 18 C.F.R. § 292.304(e)(3) (1982) indicate that, if energy from a qualifying facility would be sufficiently "firm," i.e., guaranteed to constantly be at or above a designated level, the public utility commission may consider as part of the avoided costs the cost of capital for expansion or replacement by the utility, since the purchase of power from the qualifying facility would defer the need for the utility to purchase that capital equipment.

154. 18 C.F.R. § 292.304(b)(2) (1982). The Commission rejected a lower rate, which might have passed on savings to other consumers, by stating that the savings to each individual consumer would be insignificant, and that the consumers and the public at large would benefit from the decreased use of fossil fuels. Other suggested methods for establishing lower rates were discarded as FERC thought those methods would subject the qualifying facilities to greater regulatory control, in contravention of one of the goals of PURPA § 210. *See* 45 Fed. Reg. 12,222 (1980). The basis for the FERC decision to establish the rate at full avoided cost was one of the issues in *American Electric Power Co. v. FERC*, 675 F.2d 1226 (D.C. Cir. 1982), *rev'd* 103 S. Ct. 1921 (1983). *See infra* text and notes at 244-92.

155. 18 C.F.R. § 292.304(b)(3) (1982).

156. *See* 45 Fed. Reg. 12,222 (1980). FERC thought that the maximum allowable rate best reflected the PURPA policy of encouraging cogeneration and small power production.

157. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, October 7, 1982; telephone interview with Thomas R. Morton, Vice President, Windfarms, Ltd., October 26, 1982.

158. *See infra* discussion of *American Electric* in the text at notes 244-92.

The lawsuit against FERC represents one of the conflicts brought about by PURPA.¹⁵⁹ While cases generally uphold federal regulatory authority over utilities, they have left questions of complex regulatory interactions unresolved. The interaction of federal law and state agency authority has created a "gray area" of uncertainty in the enforcement of PURPA.¹⁶⁰ This gray area has been used by utilities and regulators to hamper the implementation of the PURPA goals.¹⁶¹ The nature of this interaction must be examined in order to analyze the effectiveness of PURPA in promoting cogeneration and small power facility development.

IV. PROBLEMS GENERATED BY VARIOUS LEVELS OF REGULATORY CONTROL

Presently, regulation of electric utilities occurs through four different levels of authority. These four levels include: federal legislation; federal regulatory agency rules and decisions, such as rules and decisions by the FERC; state legislation; and state regulatory agency rules and decisions—in this case, usually rules and decisions of a state public utility commission. The interaction of state and federal laws and regulations gives rise to conflicts which invoke issues of federalism,¹⁶² preemption,¹⁶³ and administrative law.¹⁶⁴ As

159. In *American Electric*, *infra* text at notes 244-92, the petitioner challenged the FERC regulations, and argued that the regulations were not in compliance with PURPA. In *Mississippi*, *infra* text at notes 205-43, the State of Mississippi challenged the constitutionality of PURPA. Mississippi claimed that the federal government could not impose federal regulatory standards upon state regulators.

160. See the discussion of regulatory control of utilities *infra* text and notes at notes 295-342.

161. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, October 7, 1982.

162. Federalism is a term which includes the relationship between the states and the federal government. BLACK'S LAW DICTIONARY 551 (5th ed. 1979).

163. Preemption is a doctrine holding that certain matters are of such a national concern that federal laws take precedence over state or local laws regarding those matters. As such, states may not pass statutes inconsistent with federal law in an area of concern preempted by the federal government. Under the Supremacy Clause of Article VI, § 2 of the Constitution, federal judgment is deemed to preempt state judgment concerning matters within the power of the federal government. See, e.g. *Ventura County v. Gulf Oil Corp.*, 601 F.2d 1080 (9th Cir. 1979); *Ray v. Atlantic Richfield*, 435 U.S. 151 (1977); *National League of Cities v. Usery*, 426 U.S. 833 (1976); *Equal Employment Opportunity Commission v. Wyoming*, 103 S. Ct 1054 (1983). For a discussion of the preemption of utility regulation by PURPA see *infra* text at notes 205-44.

164. See, e.g. *Testa v. Katt*, 330 U.S. 386 (1947); *California v. Tayler*, 353 U.S. 553 (1957); *Washington v. Fishing Vessel Association*, 443 U.S. 658 (1979). Administrative law issues are discussed in the analysis of *American Electric v. FERC*, and *FERC v. Mississippi*, *infra* text at notes 205-92.

noted earlier,¹⁶⁵ the bulk of utility regulation has occurred at the state level. Furthermore, prior to PURPA, federal standards in utility regulation had never been imposed upon state regulatory agencies. PURPA brought about a change in this policy, as provisions of PURPA require state public utility commissions to implement certain federal standards,¹⁶⁶ and to "consider" other federal standards.¹⁶⁷ PURPA thus expanded the scope of federal regulatory jurisdiction over utilities and over state utility commissions, bringing many diverse reactions.¹⁶⁸ Many states proceeded to adopt the PURPA provisions and FERC regulations.¹⁶⁹ There were also challenges to the PURPA provisions, however, and those challenges focused on the interaction of the various levels of authority for implementing PURPA. Therefore, provisions of PURPA requiring action on the part of FERC and of state agencies will be considered, and major court cases contesting PURPA and the FERC regulations will be analyzed.

A. Federal/State Interaction Under PURPA

In order to encourage cogenerators and small power producers, PURPA includes not only provisions ensuring that those facilities can find a market for their power,¹⁷⁰ but also provisions requiring state regulatory agencies to consider the federally-promulgated standards.¹⁷¹ The provisions are, either directly or indirectly,¹⁷² aimed toward requiring or encouraging state public utility commissions to support cogeneration and small power production. Given the prominence of state regulation in the past, the exact nature of the federal entrance into traditional state matters and the reaction of the states are important concerns.

165. See *supra* text and notes at note 18.

166. For example, PURPA § 210(f)(1), 16 U.S.C. § 824a-3(f)(1) (Supp. V 1981), requires that states implement the FERC regulations promulgated pursuant to PURPA § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981).

167. For example, PURPA § 111(a), 16 U.S.C. § 2621 (a) (Supp. V 1981), requires that each state regulatory authority consider each federal retail electric rate standard.

168. See Jones, *The National Energy Act and State Commission Regulation*, 30 CASE WES. RES. L. REV. 324, 336-37 (1980).

169. Lock, *supra* note 64, at 664.

170. PURPA § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981).

171. PURPA § 210(f), 16 U.S.C. § 824a-3(f) (Supp. V 1981).

172. PURPA § 210(f), 16 U.S.C. § 824a-3(f) (Supp. V 1981) specifically requires state public utility commissions to adopt federal rules. On the other hand, PURPA § 210(e), 16 U.S.C. § 824a-3(e) (Supp. V 1981) requires FERC to prescribe rules for exempting qualifying facilities. The FERC regulations in turn, 18 C.F.R. § 292.602(c) (1982), require the state commissions to exempt qualifying facilities from certain state laws.

The provisions of PURPA expanded the scope of regulation by FERC over electric utilities to include setting standards for retail electric rates,¹⁷³ exempting qualifying facilities from state regulation,¹⁷⁴ and requiring utilities to purchase electric power from qualifying facilities.¹⁷⁵ The new scope of federal control went beyond the control of interstate and wholesale transaction rates and general regulatory policy that had previously outlined the major emphasis of the federal agency.¹⁷⁶ In expanding the scope of FERC's authority, recognition had to be made of the historically limited exercise of federal power¹⁷⁷ and the major role played by state public utility commissions in regulating utilities.¹⁷⁸ PURPA needed to reflect the co-existence of federal and state regulatory control in the manner in which various federal requirements were imposed upon the state public utility commissions.

For example, sections 111-117 of Title I of PURPA,¹⁷⁹ dealing with retail electric rate standards¹⁸⁰ (and not with cogenerators or small power producers), direct the state regulatory authorities to "consider each [federal] standard [for determining retail rates] and make a determination concerning whether or not it is appropriate to implement such standard to carry out the purposes of this chapter."¹⁸¹

173. PURPA § 210(b), 16 U.S.C. § 824a-3(b) (Supp. V 1981).

174. *Id.* § 210(e), 16 U.S.C. § 824a-3(e) (Supp. V 1981).

175. *Id.* § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981). No form of § 210 existed within the Federal Power Act prior to PURPA.

176. See S. BREYER, *supra* note 18, at 1-13.

177. See *id.* at 91.

178. For a discussion concerning the problems of shifting the regulatory burden from the states to the federal government, see generally Jones, *supra* note 168, at 365; Graine *Recent Federal Energy Legislation: Toward a National Energy Policy at Last?*, 12 ENVTL. L. 29, 41 (1981); Lagassa, *State Utility Commissions as Vestigial Organs: The Need for Regional Governance of Electric Utilities*, 28 U. KAN. L. REV. 291 (1980).

179. 16 U.S.C. §§ 2621-2627 (Supp. V 1981).

180. Retail electric rates are the rates charged to residential or commercial users; the rates are typically set by a state public utility commission after receiving data submitted by each utility.

181. PURPA § 111, 16 U.S.C. § 2621(a) (Supp. V 1981):

The purposes of this chapter are to encourage —

- (1) conservation of energy supplied by electric utilities;
- (2) the optimization of the efficiency of use of facilities and resources by electric utilities; and
- (3) equitable rates to electric consumers.

PURPA § 101, 16 U.S.C. § 2611 (Supp. V 1981).

Sections 111-117 of Title I, 16 U.S.C. §§ 2621-2627 (Supp. V 1981) outlined various retail electric metering rates to be considered by the state public utility commission. The different rate standards concerned setting electric rates according to usage, time of day, or other factors affecting the demand for electric power.

The state public utility commissions, however, are not *required* to implement the federal ratemaking standards,¹⁸² though they may be directed to explain their failure to do so.¹⁸³ In this sense, the federal government's actions in Title I is more arm-twisting than making direct orders.

In contrast, section 210 of PURPA does not deal as directly with the state public utility commissions, as it directs FERC to establish standards to encourage cogeneration and small power production¹⁸⁴ and to exempt qualifying facilities from federal and state regulatory control.¹⁸⁵ PURPA states, however, that the state public utility commissions are to implement the FERC standards regarding cogeneration and small power production in a manner prescribed by FERC.¹⁸⁶ One effect of PURPA, therefore, was to require federal policies to be *considered* by the states. PURPA also requires other federal policies to be implemented according to the FERC standards promulgated under PURPA, and in a manner prescribed by FERC.¹⁸⁷ Thus, the overall impact of PURPA upon state regulatory agencies would not be felt until FERC published regulations under PURPA.

FERC regulations establish the second tier of authority under PURPA. Regulations promulgated under PURPA section 210 establish three means by which a state public utility commission can implement the PURPA provisions regarding interconnections, purchases, and sales of electric power between utilities and qualifying facilities.¹⁸⁸ The state public utility commissions can: (1) issue regulations pursuant to the FERC guidelines; (2) attempt to resolve disputes between utilities and qualifying facilities; or (3) take "any other action reasonably designed to implement [the FERC standards under PURPA section 210]."¹⁸⁹ Thus, the states are allowed a range of action in promoting PURPA. Even though the states can do little

182. 16 U.S.C. § 2621(a) (Supp. V 1981). "Nothing in this subsection prohibits any State regulatory authority . . . from making any determination that it is not appropriate to implement any such standard. . . ." *Id.*

183. *Id.* § 2621(c)(2): "If a State regulatory authority . . . declines to implement any standard established by subsection (d) [regarding retail rates] . . . such authority . . . shall state in writing the reasons therefor."

184. *See supra* text at notes 69-75.

185. *See supra* text at note 76.

186. PURPA § 210(f)(1), 16 U.S.C. § 824a-3(f)(1) (Supp. V 1981).

187. 16 U.S.C. § 824a-3(f) (Supp. V 1981). *See supra* note 150.

188. 18 C.F.R. § 292.401 (1982).

189. 18 C.F.R. § 292.401(a) (1982). Method (2), regarding dispute resolution is arguably an action that a state public utility commission would take even in the absence of the FERC regulations. *FERC v. Mississippi*, 456 U.S. 742 (1982). *See infra* text at notes 205-43 for discussion of the *Mississippi* case.

to implement the FERC regulations,¹⁹⁰ they cannot entirely avoid taking any action pursuant to PURPA.¹⁹¹ Therefore, the enactment of PURPA and the promulgation of the FERC regulations imposed duties upon the state public utilities commissions which were not previously required.

After publication of the FERC regulations under PURPA, the state public utility commissions were given one year in which to begin implementing the PURPA standards and FERC regulations.¹⁹² Many utilities have been slow to comply with those regulations and have argued that the federal government does not have the power to force regulations upon state commissions.¹⁹³ Some states,¹⁹⁴ however, have not simply adopted the PURPA and FERC provisions, but have enacted statutes similar to PURPA (called "mini-PURPA's"), that require the respective state public utility commissions to implement regulations for exemption of qualifying facilities,¹⁹⁵ for determining electric power rates payable to qualifying facilities,¹⁹⁶ and for requiring utilities to interconnect with qualifying facilities.¹⁹⁷ These mini-PURPA's exist in many different forms and variations,¹⁹⁸ but they essentially follow some or all of the provisions of PURPA. The significance of the mini-PURPA's is two-fold: (1) states are not precluded under PURPA from placing greater requirements upon utilities than are found in PURPA, in order to encourage cogeneration and small power production;¹⁹⁹ and (2) the grant of authority to the state regulatory agency from the state

190. State regulatory agencies would conform to the FERC regulations simply by "considering" the federal standards. 16 U.S.C. § 2621(a) (Supp. V 1981).

191. 18 C.F.R. § 292.401(a) (1982). The wording of the FERC regulations is: "each State regulatory authority *shall* . . . commence implementation of [the regulations promulgated by the FERC]" (emphasis added).

192. 18 C.F.R. § 292.401(a) (1982).

193. See *infra* text and notes at notes 344-50. For a discussion of the major cases focusing on those arguments, see *infra* text and notes at notes 205-92.

194. At least seventeen states have enacted legislation including some of the provisions of PURPA: California, Connecticut, Florida, Georgia, Indiana, Kansas, Maine, Massachusetts, Minnesota, Montana, New Hampshire, New York, North Carolina, Oregon, Texas, Vermont, Virginia.

195. See, e.g., N.H. REV. STAT. ANN. ch. 362-A § 2 (1982).

196. See, e.g., N.H. REV. STAT. ANN. ch. 362-A § 4 (1982).

197. See, e.g., N.H. REV. STAT. ANN. ch. 362-A § 3 (1982).

198. See *infra* text and notes 364-89.

199. There are no provisions in PURPA prohibiting states from setting rates higher than avoided cost (the maximum level in PURPA). When the Federal Energy Regulatory Commission promulgated the regulations under PURPA, it contended that "the States are free, under their own authority, to enact laws or regulations providing for rates which would result in even greater encouragement of [cogeneration and small power production]." 45 Fed. Reg. 12,221

rather than federal government removes the issue of whether the federal government can impose standards on a state agency.²⁰⁰ Since only a few states have enacted legislation regarding small power production and cogeneration development, in the majority of states the authority of the public utility commission to aid this development derives from federal legislation. Thus, in effect, in most states the public utility commission's authority is limited to the scope of PURPA. Furthermore, since PURPA delegated much regulatory control over cogeneration and small power production to FERC,²⁰¹ each public utility commission's authority to regulate such development in states without mini-PURPA's is dependent upon the FERC regulations. Arguably, this represents a serious intrusion of federal authority into the domain of state government decision making.

In 1982, PURPA withstood a constitutional challenge, and was declared a valid exercise of congressional power under the Commerce Clause.²⁰² In addition, the validity of the FERC regulations has been upheld by the Supreme Court.²⁰³ While these decisions have helped pave the way for cogeneration and small power development, the litigation surrounding PURPA stalled—at least temporarily—such development.²⁰⁴ A discussion of the issues raised against PURPA and the FERC regulations will allow a better understanding of state concerns in implementing PURPA.

B. Major Court Decisions Under PURPA

In the two major court cases that have arisen since the passage of PURPA and the promulgation of regulations by the Federal Energy

(1980). There is an argument being advanced that PURPA has preempted the states from setting higher rate standards. The majority opinion in *FERC v. Mississippi*, 456 U.S. 742 (1982), seems to counter this argument. Justice Blackmun made two references to Congress' ability to preempt the field to encourage cogeneration and small power production, but he also implied that Congress had *not* preempted the states from enacting laws similar to PURPA. 456 U.S. at 771. This issue has yet to be resolved. Some states have set rates higher than avoided cost, and it is assumed for the purpose of this analysis that the states are not preempted from doing so.

200. See *infra* the discussion of *FERC v. Mississippi* at notes 205-43.

201. See *supra* text and notes at notes 173-92.

202. See *infra* text at notes 211-17.

203. See *infra* text at notes 271-72.

204. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, Oct. 7, 1982. Telephone interview with Thomas R. Morton, Vice President, Windfarms, Ltd. Oct. 26, 1982.

For example, a standard contract provision for contracts between Central Maine Power Company and qualifying facilities provides: "If after this agreement becomes effective Section 210 of the Public Utility Regulatory Policies Act or 35 M.R.S.A. Chapter 172 [Maine mini-PURPA] is repealed or modified so that Buyer is not required to purchase energy and capacity

Regulatory Commission, the challenges to PURPA have focused on two sets of issues. The first set of issues, which were raised in *FERC v. Mississippi*,²⁰⁵ involved a challenge to the power of Congress to pass legislation directly affecting state agencies. The state of Mississippi argued that PURPA was not a valid exercise of Congressional power under the Commerce Clause,²⁰⁶ and that PURPA unconstitutionally infringed upon the states' sovereign immunity.²⁰⁷ The second set of issues, raised in *American Electric Power v. FERC*,²⁰⁸ focused on the regulations promulgated by FERC.²⁰⁹ The challengers questioned FERC's adherence to the PURPA standards and tried to have declared invalid the FERC regulations concerning interconnection, purchase, and sale agreements between utilities and qualifying facilities. The Supreme Court held in *American Electric* that FERC had not acted arbitrarily or capriciously, nor had it exceeded its authority, in promulgating regulations under PURPA.²¹⁰ The Court's decision in *Mississippi*, upholding the constitutionality of PURPA, has much significance regarding the imposition of federal standards upon state agencies.

1. FERC v. Mississippi

The first major case brought against PURPA challenged its constitutionality. After the promulgation of the FERC regulations under PURPA, a suit was brought by the state of Mississippi and the Mississippi Public Service Commission against FERC and the Secretary of Energy,²¹¹ challenging the constitutionality of Titles

at avoided cost, Buyer reserves the right to terminate this agreement". NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC., EXCERPTS FROM COGENERATION CONTRACTS 2 (1982).

205. 456 U.S. 742 (1982).

206. Brief for Appellees Mississippi and Mississippi Public Service Commission at 42, *FERC v. American Electric Power Service Corporation*, 103 S. Ct. 1921 (1983).

207. Brief for Appellees Mississippi and Mississippi Public Service Commission, *supra* note 206, at 22. Mississippi argued that "PURPA interferes with the most basic attribute of state sovereignty. It interferes with the independent decision-making function of the Government of Mississippi in every area — legislative, administrative, and judicial." *Id.*

208. 675 F.2d 1226 (D.C. Cir. 1982), *rev'd*, 103 S. Ct. 1921 (1983).

209. *See infra* text and notes at notes 244-92.

210. *See infra* text and notes at notes 271-92.

211. The State of Mississippi and the Mississippi Public Service Commission brought suit in the Federal District Court for the Southern District of Mississippi. In a slip opinion, Justice Cox held that PURPA is "a clear usurpation of power and authority which the United States simply does not have under the Commerce Clause of the Constitution." *Mississippi v. FERC*, No. J79-0212(C), slip opinion at 9 (D. Miss. Feb. 27, 1981). Finding the provisions of PURPA to be unconstitutional, Justice Cox cited the Supreme Court decision in *National League of Cities v. Usery*, 426 U.S. 833 (1976). Justice Cox found that provisions of PURPA, like provi-

I²¹² and III²¹³ and section 210²¹⁴ of PURPA. Those provisions require state public utility commissions to consider the federal standards for retail electric rates and for utility/qualifying facility agreements. The challenge was based on a claim that those parts of PURPA exceeded congressional power under the Commerce Clause²¹⁵ and invaded state sovereignty in violation of the Tenth Amendment.²¹⁶ The Supreme Court upheld the validity of PURPA, stating that Titles I and II of PURPA were not in violation of the Commerce Clause or the Tenth Amendment.

All of the justices in *Mississippi* concurred in that part of the decision upholding congressional power to regulate electric utilities in intrastate commerce.²¹⁷ The Court cited the congressional findings outlined in PURPA section 2²¹⁸ that the regulated activities of generation, transmission and sale of electric power "have an immediate effect on interstate commerce".²¹⁹ Citing *FPC v. Florida Power and Light Co.*,²²⁰ a case in which federal regulation of intrastate power transmission had been upheld, the Court limited its inquiry under the Commerce Clause issue to determining whether the provisions of PURPA were rationally based. Noting the legislative history of PURPA in which Congress had cited the present inefficient generation of electricity, the Court held that limited regulation of retail sales of electricity and of the relationship between cogenerators and utilities was not an irrational means of encouraging energy conservation and efficient use of natural resources.²²¹

While the decision on the Commerce Clause issue was unanimous, the decision of the Court was sharply divided on the Tenth Amendment question.²²² Justice Blackmun, writing for the majority, stated that PURPA section 210 "does nothing more than preempt conflic-

sions of the Fair Labor Standards Act at issue in *National League of Cities*, usurped the authority of Mississippi agencies to control sovereign functions.

212. Codified at 16 U.S.C. §§ 2601-2627 (Supp. V 1981).

213. Codified at 15 U.S.C. §§ 3201-3211 (Supp. V 1981).

214. Codified at 16 U.S.C. § 824a-3 (Supp. V 1981).

215. U.S. CONST. art. I, § 8.

216. "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." U.S. CONST. amend.

10. See *National League of Cities*, *supra* note 211.

217. 456 U.S. at 771-75.

218. 16 U.S.C. § 2601 (Supp. V 1981).

219. 456 U.S. at 755.

220. 404 U.S. 453 (1972).

221. 456 U.S. at 758.

222. The Supreme Court split 5-4 on the Tenth Amendment issue.

ting state enactments in the traditional way.”²²³ The majority opinion went on to state that Congress could have preempted the states completely with respect to regulating retail electric sales of electricity and transactions between utilities and cogenerators.²²⁴ The requirement that state public utility commissions implement the federal rules was upheld by the Court, which noted that one of the methods for implementation prescribed by FERC — undertaking to resolve disputes between utilities and qualifying facilities²²⁵—was “the very type of activity customarily engaged in by the Mississippi Public Service Commission.”²²⁶

To support its holding that Congress could require state agencies to undertake certain activities, the majority cited *Testa v. Katt*²²⁷ and *National League of Cities v. Usery*.²²⁸ In *Testa*, the Supreme Court upheld a federal statute that gave state courts jurisdiction to hear federal claims. There, the Court said that the federal government had some power to enlist state branches of government in the furtherance of federal ends.²²⁹ In *National League of Cities*, the Supreme Court held that a federal minimum wage requirement could not be applied to employees of a state government.²³⁰ The Court reasoned that the federal wage standard impermissibly affected the states’ sovereign powers and their ability to determine their own governance.²³¹ The majority in *Mississippi* stated that PURPA did not conflict with *National League of Cities* because PURPA, in supplying standards for state regulatory agencies, did not affect the states in their sovereign capacity or threaten the states’ “separate and independent existence.”²³² According to the majority, since

223. 456 U.S. at 759.

224. *Id.*

225. 18 C.F.R. § 292.401(a) (1982).

226. 456 U.S. at 760.

227. 330 U.S. 386 (1947).

228. 426 U.S. 833 (1976).

229. 330 U.S. at 393, *quoted in* 456 U.S. at 761.

230. 426 U.S. at 833. The Supreme Court in *National League of Cities* established three factors for determining whether federal congressional action impinges upon state sovereign powers. Federal legislation will not be invalid under the Tenth Amendment if it does not: (1) regulate the “States as States,” 426 U.S. at 854; (2) address “matters that are indisputably attributes of state sovereignty,” *id.* at 845; and (3) directly impair the states’ ability to determine matters and structure operations in areas traditionally governed by the states, *id.* at 852. The Supreme Court has since modified this doctrine in *Equal Employment Opportunity Commission v. Wyoming*, 103 S. Ct. 1054 (1983), by examining more closely the degree of federal intrusion into state matters, and determining whether the affected state function is a “core sovereign function.” 103 S. Ct. at 1060-62.

231. 426 U.S. at 851.

232. 456 U.S. at 765, *quoting* *Lane County v. Oregon*, 74 U.S. (7 Wall.) 71, 76 (1869); *Coyle*

Congress could *completely* preempt the states in the regulation of electric utilities, they could "condition continued state involvement in a preemptible area on the consideration of federal proposals."²³³

Justice Powell, dissenting on the Tenth Amendment issue, argued that PURPA imposed an "unprecedented" burden on the states in requiring them to adopt certain administrative and judicial functions.²³⁴ Justice Powell argued that resolving the Commerce Clause issue by noting that Congress could completely preempt the field of utilities regulation still did not allow the federal government to force procedures upon state agencies and supplant procedures prescribed by the states for those agencies.²³⁵

Justice O'Connor wrote more bluntly in dissent on the Tenth Amendment issue, stating that PURPA Titles I and II "conscript state utility commissions into the national bureaucratic army" contrary to the holding in *National League of Cities*.²³⁶ Justice O'Connor cited a three-part test from *National League of Cities* for determining the validity of congressional actions affecting state agencies, namely, whether the legislation: (1) regulates the "States as States;"²³⁷ (2) "addresses matters that are indisputedly attribute[s] of state sovereignty;"²³⁸ and (3) "directly impair[s the States'] ability to 'structure integral operations in areas of traditional governmental functions.'" ²³⁹ Justice O'Connor argued that according to those tests, PURPA invades the states' sovereignty since it mandates action by the states,²⁴⁰ intrudes upon the states' power to set policies and make decisions,²⁴¹ and affects the function of utility regulation that has traditionally been left to the states.²⁴²

While PURPA section 210 was upheld in *Mississippi*, the widely disparate Supreme Court opinions do not indicate clear support for

v. Oklahoma, 221 U.S. 559, 580 (1911).

233. 456 U.S. at 765.

234. *Id.* at 771. Justice Powell said that "PURPA . . . breaks with [a] longstanding deference to principles of federalism." *Id.* at 772.

235. *Id.* at 773. Justice Powell asserted that Commerce Clause and Tenth Amendment limitations on Federal power are distinct and separate; satisfying one standard would not automatically mean satisfaction of the other. *Id.*

236. *Id.* at 775.

237. 456 U.S. at 778, quoting 426 U.S. at 854.

238. 456 U.S. at 778, quoting 426 U.S. at 845.

239. 456 U.S. at 778, quoting 426 U.S. at 852.

240. 456 U.S. at 779. Justice O'Connor argued that Congress *could* have addressed its comments to the utilities, rather than to state agencies. *Id.*

241. *Id.* at 779.

242. *Id.* at 781.

Congress' plan to shift regulatory authority over utilities to the federal government. This lack of support, coupled with the challenges to the FERC regulations in *American Electric*, caused a "chilling effect"²⁴³ on the development of cogeneration and small power production facilities.

2. American Electric Power v. FERC

After FERC promulgated regulations under PURPA, the American Electric Power Service Corporation challenged those regulations in federal court.²⁴⁴ American Electric Power Service Corporation questioned four provisions of the FERC rules: (1) FERC's "full avoided cost" rule for determining rates paid by utilities to qualifying facilities;²⁴⁵ (2) FERC's "simultaneous transaction" rule for metering purchases and sales of electric power to or from qualifying facilities;²⁴⁶ (3) the grant of authority to qualifying facilities to interconnect with utilities without meeting the standards of sections 210²⁴⁷ and 212²⁴⁸ of the Federal Power Act;²⁴⁹ and (4) FERC's failure to adopt fuel use criteria as a qualifying standard for cogenerators.²⁵⁰ The challengers asserted that the FERC regulations went beyond the standards established by Congress in PURPA.

American Electric Power Company contested the simultaneous transaction rule,²⁵¹ arguing that the language of PURPA contemplated actual purchases and sales between the utility and the power producer, and not merely a calculation of the net energy flow. The circuit court upheld FERC's rule, however, noting that the language of PURPA did not require such a strict interpretation.²⁵² The court also stated that FERC could reasonably have determined that such a rule promoted non-discriminatory rates for small power producers.²⁵³

243. See *supra* note 204.

244. 675 F.2d 1226 (D.C. Cir. 1982), *rev'd*. 103 S. Ct. 1921 (1983).

245. 18 C.F.R. § 292.304(b)(2) (1982).

246. *Id.* § 292.303(e). See *supra* note 143.

247. 16 U.S.C. § 824i (Supp. V 1981). The standards for allowing interconnection or requiring wheeling are discussed *supra* text at notes 98-123.

248. 16 U.S.C. § 824k (Supp. V 1981).

249. 18 C.F.R. § 292.303(c) (1982).

250. *Id.* Section 292.204 lists the qualifying criteria for cogeneration.

251. 675 F.2d at 1238. The simultaneous transaction rule, 18 C.F.R. § 292.303(e) (1982), is discussed *supra* note 140.

252. 675 F.2d at 1238.

253. *Id.*

The petitioners also challenged FERC's decision not to include fuel use criteria in the definition for cogeneration facilities.²⁵⁴ The court upheld FERC's standards for qualifying characteristics, though, stating that FERC was not required to prescribe fuel use as a qualifying characteristic for cogenerators.²⁵⁵ The language of PURPA section 201 indicated only that FERC *might* use this characteristic, and not that FERC was mandated to prescribe fuel use as a qualifying characteristic for cogeneration facilities.²⁵⁶ According to the court, the language of PURPA section 201 was permissive, unlike the language of PURPA sections 210 and 212, and allowed FERC greater latitude in determining qualifying characteristics than in granting exemptions from regulation.²⁵⁷

The circuit court struck down FERC's full avoided cost rule, holding that the result of such a rule would not be consistent with the PURPA mandate that rates payable to a qualifying facility be "just and reasonable to the consumers of the electric utility" and "in the public interest."²⁵⁸ The court observed that Congress had intended for the full avoided cost to be the *upper limit* of the rate payable.²⁵⁹ The court indicated that FERC might have been justified in choosing the maximum rate, but that FERC's rationale for its decision did not demonstrate consideration of all the competing factors, as required by PURPA section 210(b).²⁶⁰ This issue was remanded for a determination of whether FERC had sufficiently considered the impact of its rate standard on the "consumers of the electric utility" as required by PURPA.²⁶¹

The interconnection requirement — a very basic part of cogeneration and small power production — was also struck down in *American Electric*. The circuit court found that the FERC requirement that "any utility [shall interconnect with] any qualifying facility . . ." ²⁶² impermissibly exempted qualifying facilities from the safe-

254. 675 F.2d at 1241.

255. *Id.*

256. *See id.* "[Q]ualifying cogeneration facility' means a cogeneration facility which — (i) the Commission determines, by rule, meets such requirements . . . as the Commission *may*, by rule, prescribe. . . ." (emphasis added). 16 U.S.C. § 796(18)(B) (Supp. V 1981).

257. For a comparison of the discretion granted FERC in establishing qualifying criteria, *see* PURPA §§ 201(17) and 201(18), 16 U.S.C. §§ 796(17) and 796(18) (Supp. V 1981).

258. 675 F.2d at 1232, *quoting* PURPA § 210(c), 16 U.S.C. § 824a-3(c) (Supp. V 1981).

259. *See id.* at 1233. For the PURPA § 210 standards, *see supra* text at notes 124-27.

260. 675 F.2d at 1236.

261. *Id.*

262. 18 C.F.R. § 292.303(c) (1982).

guards in sections 210 and 212 of the FPA.²⁶³ These safeguards had also been placed in PURPA in order to protect the utilities and the public from potentially unsafe interconnections with qualifying facilities.²⁶⁴ The court was not persuaded by FERC's argument that compliance with sections 210 and 212 would unduly burden qualifying facilities in contravention of one of PURPA's stated goals.²⁶⁵ It held that FERC did not have the authority to issue exemptions from the FPA sections 210 and 212,²⁶⁶ stating that if the procedures are too burdensome on qualifying facilities, "the necessary amendment must come from Congress."²⁶⁷

The Court of Appeals denied a rehearing *en banc*,²⁶⁸ and FERC appealed to the Supreme Court. Even though the Supreme Court agreed to hear the case, the Appeals Court decision has had a "chilling effect" on development of cogeneration and small power production facilities.²⁶⁹ This effect has been more pronounced in those states that do not have mini-PURPA's giving the state public utility commission authority to order interconnections and establish power rates.²⁷⁰

After the circuit court decision, the Supreme Court accepted upon a writ of certiorari the appeal of the Federal Energy Regulatory Commission in *American Electric*.²⁷¹ The petitioners appealed the circuit court decisions concerning the avoided-cost rule and the interconnection rule. The Supreme Court, in a unanimous decision,²⁷² reversed the lower court on both issues.

The Supreme Court began its discussion of the full-avoided-cost rule by noting that the proper standard of review was whether the FERC rule was "arbitrary and capricious."²⁷³ The Court stated that,

263. 675 F.2d at 1240. PURPA § 210(e)(3)(B), 16 U.S.C. § 824a-3(e)(3)(B) (Supp. V 1981) directs that FERC may not exempt qualifying facilities from the safeguards in 16 U.S.C. §§ 824i-824k (Supp. V 1981).

264. CONFERENCE REPORT, *supra* note 15, at 7826-28.

265. PURPA § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981). The Commission was to prescribe rules to encourage cogeneration. *Id.* 16 U.S.C. § 824a-3(a).

266. 16 U.S.C. §§ 824i, 824k (Supp. V 1981).

267. 675 F.2d at 1240.

268. 675 F.2d 1246 (D.C. Cir. 1982).

269. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, Oct. 7, 1982. Telephone interview with Thomas R. Morton, Vice President, Windfarms, Ltd. Oct. 26, 1982. See *supra* note 204.

270. *Id.*

271. 74 L. Ed. 2d 165, 103 S. Ct. 206 (1982).

272. The decision was 8-0; Justice Powell did not participate. 103 S. Ct. 1933.

273. 103 S. Ct. at 1927. According to this standard of review, a court grants the agency much deference and will find a regulation invalid only if the agency's action in promulgating

under the appropriate standard, it must "determine whether the agency adequately considered the factors relevant to choosing a rate that will best serve the purposes of the statute. . . ." ²⁷⁴ The criteria set forth in PURPA section 210(b) ²⁷⁵ establish that the rate payable to qualifying facilities must be "just and reasonable to the electric consumers . . . and in the public interest" ²⁷⁶ and non-discriminatory to qualifying facilities. ²⁷⁷ Since the full-avoided-cost rule plainly does not discriminate against qualifying facilities, ²⁷⁸ the Court noted that its consideration of the rule hinged only upon whether it meets the "just and reasonable" criteria. ²⁷⁹

In reviewing the legislative history of PURPA, the Supreme Court found a strong congressional intent to support energy-producing technology which utilizes non-fossil fuels. ²⁸⁰ The Commission could thus establish a rate that would "provide a significant incentive for a higher growth rate," ²⁸¹ according to the Court, in order to benefit ratepayers and the public at large. ²⁸² Furthermore, the Court did not equate "just and reasonable" with "the lowest possible reasonable rate. . ." as argued by the respondents. ²⁸³ The Supreme Court held that, in light of the congressional intent to support cogeneration and small power production and to relieve qualifying producers from intrusive regulations, FERC's decision to prescribe the maximum rate authorized by PURPA was reasonable and therefore valid. ²⁸⁴

In its discussion of the FERC interconnection rule, the Court first noted that "[t]he authority to promulgate such rules as are necessary to require purchases and sales plainly encompasses the power to promulgate rules requiring utilities to make physical connections with

the rule seems arbitrary. The Supreme Court also noted that the circuit court may have applied the "substantial evidence" standard. *Id.* at 1927, n.7. A court using the latter standard does not grant as much deference to an agency as when the "arbitrary and capricious" standard is used, but requires that the agency decision be supported by a substantial factual basis.

274. 103 S. Ct. at 1928.

275. 16 U.S.C. § 824a-3(b) (Supp. V 1981).

276. *Id.*

277. *Id.*

278. Of the range of rates that FERC could have chosen, it picked those rates most advantageous to qualifying facilities. See the discussion of the avoided-cost rule, *supra* text and notes at notes 124-36.

279. 103 S. Ct. at 1928.

280. *Id.* at 1929.

281. *Id.*, quoting 45 Fed. Reg. 12,222 (1980).

282. 103 S. Ct. at 1929.

283. *Id.* at 1928, quoting *Atlantic Refining Co. v. Public Service Commission of New York*, 360 U.S. 378, 388 (1959).

284. 103 S. Ct. at 1930.

qualifying facilities No purchase or sale can be completed without an interconnection between the buyer and seller.”²⁸⁵ While American Electric Power Company had argued that PURPA section 210(e)²⁸⁶ requires a case-by-case analysis by FERC as to whether an interconnection would be required, the Supreme Court rejected that interpretation.²⁸⁷ Such a requirement, the Court stated, “would seriously impede the very development of cogeneration and small power production that Congress sought to facilitate.”²⁸⁸ The Court also found that the interconnection rule does not relieve qualifying facilities of any requirements imposed by sections 210²⁸⁹ and 212²⁹⁰ of the Federal Power Act. Rather, the FERC rule merely permits qualifying facilities to force utilities to make interconnections.²⁹¹ Thus, FERC’s interpretation of the PURPA interconnection provision was, in the Court’s opinion, a reasonable interpretation.²⁹²

In the *Mississippi* and *American Electric* decisions, the PURPA provisions and the FERC regulations under PURPA have been upheld. PURPA does not, however, have the wholehearted support of the utilities or of state public utility commissions.²⁹³ Thus, even the Supreme Court decision in *American Electric* may not end the litigation over the validity of the PURPA provisions and the FERC regulations. The structure of a utility is closely tied to the regulation of that utility, and the enactment of PURPA had a significant effect upon utility regulation.²⁹⁴ Even though the constitutionality of PURPA has been upheld, and the FERC regulations remain intact, utilities may still continue to resist buying power from qualifying facilities, as required by PURPA. Since authority has been delegated to the state public utility commission to implement PURPA, those commissions must force utilities to comply with PURPA. Even

285. *Id.* at 1930-31.

286. 16 U.S.C. § 824a-3(e) (Supp. V 1981).

287. 103 S. Ct. at 1931. The circuit court had agreed with the respondents, and had held that an evidentiary hearing was required by PURPA for each proposed interconnection. 675 F.2d at 1240-41.

288. 103 S. Ct. at 1931.

289. 16 U.S.C. § 824i (Supp. V 1981).

290. *Id.* § 824k.

291. 103 S. Ct. at 1932.

292. *Id.* at 1933.

293. Jones, *supra* note 168, at 336.

294. Even though public utility commissions had only to *consider* the FERC regulations, PURPA did impose additional burdens upon the regulators. Many public utility commissions viewed PURPA as encroaching upon traditional state prerogatives and stretching already strained agency resources even further. Jones, *supra* note 168, at 336.

though the constitutional hurdles have been cleared, PURPA must still face challenges of implementation on a more practical level. The changes brought by PURPA may vary from state to state, but certain difficulties will be encountered in most states. These difficulties stem from the economic and political factors surrounding utility regulation.

V. THE ECONOMICS AND POLITICS OF UTILITY REGULATION

The structure of public utilities is different from most other businesses and corporations.²⁹⁵ Perhaps most significantly, public utilities are heavily regulated by governmental agencies. In exchange for allowing a public utility to have a monopoly on the service it provides within a certain geographical area, state and federal governments impose extensive controls and regulations on the activities of the utility.²⁹⁶ In general, regulation of a utility focuses on requiring a particular level and quality of service at a cost which is determined by the regulator.

The regulation of public electric utilities has traditionally been vested in a state agency²⁹⁷ which is given its powers by state legislation. The state agency, typically called a public utility commission, is charged with overseeing the function of utilities within its jurisdiction. Its work generally involves a large amount of contact with the utility on a regular basis²⁹⁸ so the public utility commission can effectively monitor the utility under the state laws. The unique aspects of a utility — particularly the utility/regulatory agency relationship — must be examined to understand and evaluate the PURPA and FERC provisions.

State public utility commissions typically regulate a range of public utilities, including those involved with public transportation, electricity and gas transmission and sales, water supply, and telephones. A state public utility commission is established by state legislation,²⁹⁹ or in the case of a few states,³⁰⁰ by the state constitution. The enabling legislation outlines the powers and authority of the public

295. For a good discussion of utility structure, *see generally* P. GARFIELD, *supra* note 10, at 15-27.

296. *See generally* P. GARFIELD, *supra* note 10, at 16-26. The extent and nature of controls imposed upon utilities is discussed *infra* text at notes 299-322.

297. *See* S. BREYER, *supra* note 18, at 91.

298. *See* D. ANDERSON, *supra* note 27, at 62.

299. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 25, § 1 (West 1981): "There shall be a department of public utilities, in this chapter called the department. It shall have an official seal, which shall be judicially noticed."

300. *See, e.g.*, CAL. CONST., art. XII, §§ 1-9.

utility commission and grants the public utility commission jurisdiction over the entry of utilities into the field,³⁰¹ discontinuance of service by the utility,³⁰² rate changes for utility services,³⁰³ and other points of substantive law arising in the course of proceedings before the public utility commission.³⁰⁴ The public utility commission may be required to adjudicate matters arising between a utility and its constituents, the general public.³⁰⁵ State enabling legislation typically gives the public utility commission power to enforce its regulations in court,³⁰⁶ and establishes the matters to be considered regarding public utility commission orders in a subsequent court hearing.³⁰⁷ It is important to note that state legislation, while giving the public utility commission jurisdiction over certain utility functions, does not usually enumerate specific powers or require specific actions on the part of the public utility commission. Instead, enabling legislation is usually couched in general terms,³⁰⁸ and the public utility commission must fill in the gaps with its own procedures and regulations.

301. *See, e.g.*, the California statute, which states in part:

No railroad corporation whose railroad is operated primarily by electric energy, street railroad corporation, gas corporation, electrical corporation, telegraph corporation, telephone corporation, water corporation, or sewer system corporation shall begin the construction of a street railroad, or of a line, plant, or system, or of any extension thereof, without having first obtained from the commission a certificate that the present or future public convenience and necessity require or will require such construction.

CAL. PUB. UTIL. CODE § 10901 (West Supp. 1983).

302. *See, e.g.*, the Massachusetts statute, which states in part:

Upon request of the mayor of a city or the selectman of a town, or of a member of the general court or of twenty customers of the company affected, a public hearing ordered by the department, to be held in connection with any change in rates or reduction in or discontinuance of service, shall be held in the city or town or area wherein the company affected does business or in which any decision of the commission would apply.

MASS. GEN. LAWS ANN. ch. 25, § 4A (West 1981).

303. *Id.*

304. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 25, § 5 (West 1981). One part of § 5 states: "When so requested by any party interested, the commission shall rule upon any question of substantive law properly arising in the course of any proceeding before the commission or any member or members thereof . . ."

305. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 25, § 4A (West 1981).

306. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 25, § 5 (West 1981). A portion of § 5 states: "Any decision, order or ruling of the commission shall be effective and may be enforced according to its terms and the operation or enforcement thereof shall not be suspended or stayed by the entry of an appeal therefrom."

307. *Id.* § 5: "No evidence beyond that contained in the record [of the public utility commission hearing] shall be introduced before the court except that [the court may order additional evidence in cases involving confiscation or constitutional rights]."

308. For example, see CAL. PUB. UTIL. CODE § 701 (West 1975), which provides: "The commission may supervise and regulate every public utility in the State and may do all things,

Most states have an administrative procedure act³⁰⁹ which outlines the forms and procedures that a public utility commission, as a state agency, must follow in holding hearings or adjudicating disputes,³¹⁰ or in conducting any task authorized or required by the state enabling legislation.³¹¹ A state public utility commission is granted the authority³¹² — and in some situations is required³¹³ — to issue regulations respecting certain standards under its jurisdiction. These regulations may specify the method of rate calculations to be used by the public utility commission³¹⁴ or the amount and content of information to be provided to the public utility commission by the utility.³¹⁵ The general scope of regulation of a utility by a public utility commission usually includes the following aspects:³¹⁶

(1) The public utility commission may require the utility to secure permission to enter the market;³¹⁷

(2) The public utility commission may set up exclusive franchises within a specified geographic area, creating a monopoly;³¹⁸

whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction."

309. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 30A (West 1979 & Supp. 1983). The federal government has a similar act, covering federal administrative and regulatory agencies, found in scattered sections of 5 U.S.C.

310. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 30A, §§ 2-3A (West 1979). For example, the public utility commission may be required to publish written notice of a hearing to all affected parties, allow testimony by those interested parties, and require certain parties to make information available to other parties. *Id.* § 3A.

311. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 30A, § 1(1) (West 1979) (very broad definition of "adjudicatory proceeding", so as to apply to most agency actions).

312. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 25, § 17 (West Supp. 1982) (granting the commission authority to calculate and make assessments against public utilities).

313. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 25, § 5B (West Supp. 1982), which provides: "The department shall issue, following public hearings in accordance with chapter thirty A [administrative practice act], rules and regulations for the enforcement of section thirty-three A of chapter one hundred sixty-four [respecting promotional and political advertising by utilities]."

314. *See, e.g.*, MASS. ADMIN. CODE tit. 220 § 8.04 (1981). (Calculation of Energy Rates for the Sale of Electricity by Qualifying Facilities to Utilities).

315. *See, e.g.*, MASS. ADMIN. CODE tit. 220 § 1.11(7) (1981) (requiring utilities to file evidentiary documents in support of arguments).

316. D. ZILLMAN, *supra* note 24, at 135-36.

317. *See supra* note 301 for the California statute requiring utilities to secure permission to enter the field.

318. *See, e.g.*, the California statute, which provides in part:

If any public utility, in constructing or extending its line, plant, or system, interferes or is about to interfere with the operation of the line, plant, or system of any other public utility or of the water system of a public agency, already constructed, the commission, on complaint of the public utility or public agency claiming to be injuriously affected, may, after hearing, make such order or prescribe such terms and conditions for the location of the lines, plants, or systems affected as to it may seem just and

(3) The public utility commission may require the utility to maintain a certain level or standard of service, and to offer that service to all consumers within the franchise area in a non-discriminatory fashion;³¹⁹

(4) The public utility commission may allow the utility to charge only "just and reasonable" rates;³²⁰

(5) The public utility commission may regulate financial aspects of the utility, such as the issuance of bonds;³²¹ and

(6) The public utility commission may require the utility to seek permission to discontinue any services.³²²

The need for regulation of public utilities stems primarily from the monopolistic nature of utilities.³²³ That monopolistic nature is, in turn, founded upon both economic characteristics unique to the utility industry³²⁴ and the nature of the service provided, i.e., to serve a basic societal need that does not vary significantly with the cost of the product.³²⁵ In order to regulate the rates charged to the public, the state public utility commission must analyze the costs of operation of each utility in its jurisdiction based on the data provided to the

reasonable.

CAL. PUB. UTIL. CODE § 1001 (West Supp. 1983).

319. See, e.g., MASS. GEN. LAWS ANN. ch. 164, § 93 (West 1976) (regarding orders by the commission to the utility requiring the utility to reduce the rates for service or change the quality of the service offered).

320. See, e.g., CAL. PUB. UTIL. CODE § 451 (West Supp. 1983), which provides in part: "All charges demanded or received by any public utility, or by any two or more public utilities, for any product or commodity furnished or any services rendered shall be just and reasonable. . . ." Control over utility rates is usually one of the more visible aspects of public utility commission regulation, due to the direct effect of rate changes on the general public.

321. See, e.g., MASS. GEN. LAWS ANN. ch. 164, § 13A (West Supp. 1983) (setting standards for the issuance of bonds by a utility, relative to the utility's current capital stock).

322. See, e.g., MASS. GEN. LAWS ANN. ch. 164, § 21 (West 1976) (requiring a utility to seek authorization to transfer its franchise or alter its works).

323. See generally P. GARFIELD, *supra* note 10, at 15-19.

324. P. GARFIELD, *supra* note 10, at 16-26. As compared to general business and manufacturing entities, utilities have a very high fixed capital investment in relation to gross revenues. This leads to significantly higher taxes in relation to gross revenues than most businesses in other industries. *Id.* Furthermore, utilities have often been singled out for additional taxation. *Id.* at 386. For instance, in the Energy Tax Act of 1978, utilities were specifically made ineligible for energy tax credits, even though they could have been considered as a prime source for developing energy alternatives. I.R.C. § 48(1)(3)(B) (Supp. V 1981). See Friedmann and Mayer, *Energy Tax Credits in the Energy Tax Act of 1978 and the Crude Oil Windfall Profits Tax Act of 1980*, 17 HARV. J. ON LEGIS. 465, 484-85 (1980).

325. P. GARFIELD, *supra* note 10, at 19-20. The majority of electric consumers have no access to alternative sources of electric power. While boosting electric rates may result in some decrease in use, such decrease is usually not significant, if present at all; i.e., there is high price elasticity of basic utility services.

public utility commission by the utility.³²⁶ The public utility commission then establishes a rate that allows the utility a fair rate of return.³²⁷

In carrying out their regulatory functions, state public utility commissions generally have two types of tasks: (a) policy-setting tasks, which require the public utility commission to make a specific decision on a specific issue; and (b) appraisal and coordinating tasks, such as processing a rate request, that are of a more bureaucratic nature.³²⁸ Public utility commissions also have to respond to external pressures from state administrators and legislators, from their "clients," the public-at-large, and from special-interest groups.³²⁹ Thus, each public utility commission is a combination of bureaucratic and political entities which do not necessarily have the same goals.³³⁰ One result of this situation is that the management of a public utility commission may want to change the public utility commission procedures in response to outside pressure, whereas the public utility commission staff, who may be insulated from external or political pressures, may want to maintain existing procedures in order to minimize strain or additional work.

Finally, state public utility commissions are generally greatly understaffed given the amount of information they are required to process.³³¹ Because of insufficient resources, public utility commissions must often look for external support, although this may be at

326. See generally *id.* at 44-56. The cost of service includes operating expenses, depreciation expenses, taxes, and gross valuation of capital minus accrued depreciation. A primary concern of the public utility commission is that improper expenses are not included, and that includible expenses are "reasonable and necessary." *Id.*

327. *Id.* at 118-33. A reasonable rate of return has been held as that rate "generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties," *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923), and "sufficient to assure confidence in the financial integrity of the enterprise," *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944). While the rate may not be so low as to be confiscatory, 262 U.S. at 683, the public utility commission does not have to protect the utility from "business hazards", *Public Service Commission of Montana v. Great Northern Utilities Co.*, 289 U.S. 130, 135 (1932), or "economic forces", *Market Street Railway Co. v. Railroad Commission of California*, 324 U.S. 548, 567 (1945).

328. D. ANDERSON, *supra* note at 27, at 18-19.

329. *Id.* at 2.

330. *Id.* For example, public utility commissioners, in response to political pressure, may want to implement a new procedure for dealing with utilities. The bureaucratic arm of the agency, however, may be more interested in maintaining the status quo in order to avoid disrupting relations with the utilities, thereby adding to the agency's workload.

331. *Id.* at 9. As business strategy is the "application of massive resources to limited objectives", regulatory agency strategy is the "application of limited resources to massive objec-

the expense of political clout.³³² In return for aid in the form of information or political support, the agency may have to adopt the positions of the special interest group providing that support; in order to continue receiving any external support, the agency, in its decisions, will need to recognize the viewpoints and positions of its "supporters."³³³

State public utility commissions, in deriving their power from state governments, are often subject to the political vagaries of a state legislature or administration, particularly with regard to funding or the appointment of head administrators.³³⁴ Because of these political influences, and because the public utility commissions generally are not given specific powers by the legislature,³³⁵ enforcement of their provisions on a day-to-day basis may be very difficult in practice. Varying political control from a legislature,³³⁶ combined with funding levels which are often inadequate, engender many uncertainties at a public utility commission.³³⁷ In addition, a public utility commission must often review extensive and complex data provided by the utilities.³³⁸

The roles of public utility commission and utility are usually opposing, and utilities are likely to prod at the weaknesses of a public utility commission by exploiting the commission's lack of political power, or by flooding the commission with unnecessary information.³³⁹ Because of these factors, regulation of the utility industry by state public utility commissions has tended to occur from a defensive posture aimed at preventing abuses rather than promoting the goals of utility regulation.³⁴⁰ Regulation from this stance means that

tives". Bower, *Effective Public Management*, 55 HARV. BUS. REV. 131 (1977), quoted in ANDERSON, *supra* note 27, at 9.

332. D. ANDERSON, *supra* note 27, at 10-14. External support would generally come from special-interest groups, such as environmental concern organizations, or consumer-interest foundations. Support could also come from the utility industry itself. "Support" from a utility or other organization usually means providing information to the public utility commission or generating support for difficult issues. Special-interest groups often provide a form of support to a public utility commission by adopting a stance directly opposite that taken by a utility on a particular issue. This type of situation allows the public utility commission to take the middle ground, which is likely to be a stronger position politically. *Id.*

333. *Id.*

334. See D. ANDERSON, *supra* note 27, at 8-9.

335. See *supra* text and notes at note 308.

336. See D. ANDERSON, *supra* note 27, at 10-12.

337. See *infra* text and notes at notes 329-42.

338. See D. ANDERSON, *supra* note 27, at 64-68.

339. *Id.* at 15-18.

340. *Id.* at 61. Public utility commissions are frequently so overburdened with work that all

utilities have been making major decisions as long as the public utility commission has considered those decisions to be "just and reasonable."³⁴¹

The combination of political uncertainty, the conflicting nature of public utility commission tasks, and the lack of resources demonstrate the need for strong and specific legislative backing for a public utility commission, to enable it to assert itself and effectively carry out its policies. Lacking such support, the public utility commission is more likely to be heavily influenced by the actions of the utilities over whom it theoretically has control.³⁴² Therefore, implementation of PURPA may vary greatly with the amount of control that each public utility commission can exert. State legislation may establish the amount of influence exerted by the public utility commission, and therefore may affect the commission's ability to gain the utilities' compliance with PURPA. Thus, state legislative support of agency authority may be crucial in the encouragement of cogeneration and small power production. Since PURPA requires active cooperation from the states to implement its programs, the following section examines the existing state regulatory schemes concerning cogeneration and small power production.

VI. STATE LEGISLATION CONCERNING COGENERATION AND SMALL POWER PRODUCTION OF ELECTRICITY

A number of states have enacted legislation concerning cogeneration and small power production.³⁴³ These statutes must be assessed in light of PURPA, as they may advance or retard the achievement of its goals. Most of this legislation has been directed toward the state public utility commission, and has authorized the commission to take action encouraging or requiring utilities to purchase power from cogenerators or small power producers. Legislation at the state level may be very important in order to effectuate the development of efficient electric power generation.

of their time is spent reacting to requests, demands, and actions of others, and little time is spent actively promoting state or federal interests. *Id.*

341. *Id.* The "just and reasonable" standard for allowable return for utilities was established in *Hope Natural Gas*, 320 U.S. at 602.

342. D. ANDERSON, *supra* note 27, at 10-14. A state legislature could provide more support by: allowing greater funding of public utility commission activities; by authorizing or requiring, in a more specific manner, the public utility commission to take certain activities in regulating utilities; or by structuring laws affecting utilities so as to give the public utility commission more leverage in enforcement. *Id.*

343. The states are listed *supra* note 194.

A. Background

Many utilities have been slow to comply with PURPA and the FERC regulations promulgated thereunder.³⁴⁴ Reasons given for this hesitation include: (1) government's lack of power to impose federal standards in PURPA upon state regulatory agencies;³⁴⁵ (2) FERC's standard that rates payable to qualifying facilities be equal to full avoided cost reaches beyond the authority given FERC;³⁴⁶ (3) FERC's requirement that any utility interconnect with any qualifying facility is in violation of the PURPA provisions for insuring safety and reliability;³⁴⁷ and (4) the FERC's provisions, while complying with the PURPA goal of encouraging cogeneration and small power production, do not adequately consider the "public interest" as mandated by PURPA.³⁴⁸

As discussed earlier,³⁴⁹ these arguments were largely raised in the *Mississippi* and *American Electric* cases. The imposition of federal standards upon the states by PURPA was upheld in *Mississippi*, and the FERC regulations were ultimately upheld in *American Electric*. There has been much delay, however, in establishing the validity of the regulatory scheme under PURPA, and the development of small power production facilities has not regained its momentum.³⁵⁰

Small power producers and cogenerators have had to depend on state public utility commissions to apply pressure to the utilities to interconnect with and purchase power from those producers and cogenerators.³⁵¹ The state public utility commissions, in turn, have

344. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, Oct. 7, 1982.

345. See *supra* discussion of FERC v. Mississippi, at notes 212-42.

346. See *supra* discussion of *American Electric*, at notes 244-92.

347. *Id.*

348. *Id.*

349. See *supra* text and notes at notes 212-92.

350. Telephone interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, August 24, 1983.

351. Telephone interview with Doug Short, staff economist, Massachusetts Department of Public Utilities, October 25, 1982. Most of the prospective cogeneration or small production facilities require some sort of financing, or at least represent a major investment even for industries that do not need to seek external financing. The procurement of financing will in turn depend almost entirely on the economics of the situation; i.e., how much of a return can be expected on the investment, and how quickly can the facility become self-supporting. Once the projected development, capital, and operating costs have been established, the answer to those questions will depend primarily on the rate to be paid by the utility to the qualifying facility for power. Of equal import to the expected rate, in the eyes of the lenders, is the stability of that rate. Toward that end, lenders will require long-term contracts with a guaranteed rate before lending money for the project. See Greenman, *Interface Between Developers of Small Hydro Projects and Utilities*, 5 VT. L. REV. 313, 326 (1980). In return for long-term contracts, many

encountered great difficulty in obtaining the utilities' compliance with PURPA.³⁵² The public utility commissions' stance in the face of attacks on PURPA has generally been very tentative because of: (1) the political nature of public utility commissions and their need for support in regulating utilities;³⁵³ (2) the attacks on the validity of public utility commission authority derived from the federal government;³⁵⁴ and (3) the disruption and delay due to the litigation surrounding *American Electric*,³⁵⁵ in implementing the FERC provisions, which had authorized the state public utility commissions to require interconnections between utilities and qualifying facilities and to establish rates for electric power produced by qualifying facilities.

Under the provisions of PURPA, electric utilities may be required to engage in power transactions with other producers of power. From the utilities' perspective, these transactions will result at best in a smaller increase in future expansion than expected, or at worst in the emergence of a competing unregulated industry, bringing to the utilities a loss of business and revenue.³⁵⁶ PURPA contains no practical incentives for utilities and is, in fact, contrary to their interests. These factors underscore the need for strong state support of cogeneration and small power production.

Regardless of the delay and uncertainty resulting from the PURPA litigation, the various problems that have arisen under PURPA involve issues that can be resolved at the state level. Because the states are the primary regulators of utilities,³⁵⁷ and because the authority given to a state public utility commission to act can come most clearly from the state itself,³⁵⁸ state legislation seems to be an ideal means for finding a solution to the gaps, ambiguities, and disagreements that have arisen pursuant to the enactment of PURPA. Some states have taken various constructive measures in this direction that are worth noting.

utilities will demand price concessions, with the eventual rate below that set by the state public utility commission. *Id.* at 326-27.

352. Jones, *supra* note 168, at 336.

353. See *supra* text and notes at notes 336-41.

354. See *supra* text and notes at notes 212-42.

355. See *supra* text and notes at notes 244-92.

356. See generally Jones, *supra* note 168, at 336-37.

357. S. BREYER, *supra* note 18, at 91.

358. See *supra* the discussion of the federalism issue, and the imposition of federal regulations on state regulatory agencies, in the FERC v. Mississippi analysis, at notes 212-42.

B. State Legislation After PURPA

The overall scheme of PURPA allows the states to take independent action in order to achieve the goals of the statute.³⁵⁹ States may choose from a number of approaches to resolve the federal/state conflicts,³⁶⁰ the perceived lack of power or authority of public utility commissions under PURPA,³⁶¹ and the unwillingness of utilities to comply with the provisions of PURPA requiring interconnection with and purchase of power produced by qualifying facilities.³⁶² Through legislation, states could grant the public utility commission specific authority to implement PURPA; they could enact a mini-PURPA, encompassing the same interconnection, exemption, and rate standards as the federal legislation; finally, states might offer incentives to utilities to participate in the development of cogeneration and small power production. There are a small number of states that have used these methods.

1. Increasing Public Utility Commission Authority

One approach could be to resolve the federal/state tension incurred by imposing federal provisions on state agencies. States could neutralize this conflict by enacting legislation specifically granting the state public utility commission the authority to implement the Federal Energy Regulatory Commission provisions. A state statute granting this authority removes the argument that the federal government cannot impose its procedures and mandates upon state agencies.³⁶³ Two states have taken this step and have authorized their respective public utility commissions to apply the PURPA provisions in the state.³⁶⁴ Giving the state public utility commission the authority to implement the PURPA provisions and FERC regulations, however, does not resolve the problem presented by *American Electric*. Additionally, this approach may not provide sufficient sup-

359. See *supra* notes 147 and 194.

360. The federal/state conflicts were the focus of the *Mississippi* case, discussed *supra* text at notes 205-43.

361. See *supra* text at notes 351-53.

362. See *supra* the discussion of *American Electric*, at notes 244-92.

363. This argument was raised by the State of Mississippi in *FERC v. Mississippi*. See *supra* text and notes at notes 205-43.

364. FLA. STAT. ANN. § 366.05(9) (West Supp. 1983); TEXAS CORPS. & ASS'NS CODE ANN. § 1446c-16A (Vernon Supp. 1983). For example, TEXAS CORPS. & ASS'NS CODE ANN. § 1446c-16A states: "The commission shall make and enforce rules reasonably required to implement the rules and regulations of the Federal Energy Regulatory Commission pertaining to the production of electric energy by qualifying cogenerators and qualifying small power producers."

port for a utility commission which does not have the resources to enforce federal policies.³⁶⁵

2. State Mini-PURPA's

The second approach would be for the *state* to authorize the state public utility commission to require interconnection, or to set rates for power produced by qualifying facilities. Authorization would thus be vested in the state public utility commission by a mini-PURPA,³⁶⁶ and would not be dependent on the status of the federal regulations. Under the FERC regulations, the states are not prohibited from taking this approach.³⁶⁷ The specific grant of authority from a state legislature to a state public utility commission further enhances the commission's power to enforce compliance by the utilities with PURPA, as such authority avoids the question of whether the state commission can be empowered by federal legislation.³⁶⁸

Currently, eleven states³⁶⁹ have enacted statutes with interconnection requirements or rate-setting standards. Two³⁷⁰ of the eleven states, in specifically granting authority to their public utility commissions to set rates for qualifying facility power, do not enumerate standards for setting those rates. The other nine states³⁷¹ specify standards for the public utility commissions to consider in setting the rates. These standards range from the New York standard of "just and economically reasonable to the rate-payers"³⁷² to the North

365. See the discussion of state agency effectiveness in relation to political and economic support, *supra* text and notes at notes 328-42.

366. A grant of authority to the state public utility commission by the state legislature would not be questioned because the state legislature can authorize the public utility commission to act as the state desires. See *supra* text and notes at notes 299-308.

367. FERC indicated that the regulations under PURPA were to act as minimum standards, and the states could place greater requirements upon utilities to encourage cogeneration and small power production. 45 Fed. Reg. 12,221 (1980).

368. See *supra* text at notes 205-43 for a discussion of FERC v. Mississippi.

369. CAL. PUB. UTIL. CODE § 2801 (West Supp. 1983); CONN. GEN. STAT. § 16-243a (West Supp. 1983); IND. CODE ANN. § 8-1-2.4-4 (Burns 1982); KAN. STAT. ANN. § 66-1,184 (1980); ME. REV. STAT. ANN. tit. 35 § 2325 (West Supp. 1982); MINN. STAT. ANN. § 216B.164 (West Supp. 1983); MONT. CODE ANN. § 69-3-603 (1981); N.H. REV. STAT. ANN. ch. 362-A § 3 (Supp. 1981); N.Y. PUB. SERV. LAW § 66-c (McKinney Supp. 1983); N.C. GEN. STAT. § 62-156 (1982); OR. REV. STAT. § 758.510 (1981).

370. N.H. REV. STAT. ANN. ch. 362-A § 4 (Supp. 1981); KAN. STAT. ANN. § 66-1, 184 (1980). See, e.g., N.H. REV. STAT. ANN. ch. 362-A § 4 (Supp. 1981): "Public utilities purchasing electrical energy in accordance with the provisions of this chapter shall pay a price per kilowatt hour to be set from time to time, by the public utilities commission."

371. The statutes are listed *supra* note 369. All statutes except those from New Hampshire and Kansas specify rate-setting standards.

372. The New York statute provides in part:

Carolina requirement³⁷³ that the public utility commission set the rates at full avoided energy and capacity costs.³⁷⁴ The establishment of rate-setting standards by a state legislature makes the authority of the state public utility commission for setting qualifying facility rates and requiring interconnections independent of the federal regulations. State legislation also gives additional backing to the public utility commission which may reduce the strains on the public utility commission staff.³⁷⁵ Furthermore, legislative specification of rate standards allows a utility commission to focus its efforts on issues other than establishing such standards.³⁷⁶

A grant of greater or more specific authority to a public utility commission is a means of enforcing compliance with the commission's regulations. Utilities, however, have resisted forced participation in the development of alternative energy sources, particularly when they have not been assured of any ultimate gain from the encouragement of qualifying facility power production.³⁷⁷ Offering incentives to electric utilities for their participation in qualifying facility power production, the third approach considered, may therefore be very desirable in order to smooth implementation of the FERC provisions.

[T]he commission shall require any electric corporation or steam corporation (a) to enter into long-term contracts to purchase or wheel electricity . . . from any alternate energy production facility, small hydro, or cogeneration facility under such terms as the commission shall find just and economically reasonable to the corporation's rate-payers, nondiscriminatory to cogenerators, small hydro producers, and alternate energy producers

N.Y. PUB. SERV. LAW § 66-c (McKinney Supp. 1983).

373. N.C. GEN. STAT. § 62-156(b)(2) (1982).

374. This section provides in part:

The rates paid by a utility to a small power producer shall not exceed, over the term of the purchase power contract, the incremental cost to the electric utility of the electric energy which, but for the purchase from a small power producer, the utility would generate or purchase from another source. A determination of the avoided energy costs to the utility shall include a consideration of the following factors over the term of the power contracts: the expected costs of the additional or existing generating capacity which could be displaced

Id.

375. See *supra* text and notes at notes 334-42 for a discussion on the effect of stronger legislative and political support upon public utility commission strength.

376. For instance, if the state statute provides a standard for rate-setting for the state public utility commission to implement, then the public utility commission must concern itself with implementation. If no standard is expressed by the state, however, the public utility commission must hold hearings according to a state administrative procedure act to determine the appropriate standards, before it can implement them. See D. ANDERSON, *supra* note 27, at 10.

377. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, February 15, 1983.

3. Statutory Incentives for Utilities

Offering incentives to utilities is a different approach from increasing public utility commission authority. Whereas increasing public utility commission authority is a means of enforcing compliance with PURPA, offering incentives to utilities is more a means of coaxing compliance. This third approach has been taken by two states, Montana³⁷⁸ and New York,³⁷⁹ which have enacted legislation allowing utility participation in small power production development.³⁸⁰ The Montana and New York requirements are less restrictive than those of the FERC. The FERC regulations restrict utility ownership of a qualifying facility to less than fifty percent equity interest.³⁸¹ Under both the Montana and New York statutes, utilities may own more than fifty percent equity interest in a qualifying facility. The Montana statute³⁸² pertains only to hydroelectric projects. Under the Montana statute, the state public utility commission is given the authority to determine which locations are to be used,³⁸³ to accept applications for leasing,³⁸⁴ to determine the lessee and conditions for operation,³⁸⁵ and to retain all licenses and permits.³⁸⁶ Even with all of these restrictions, utilities may be interested in entering the market since the power produced by qualifying facilities is not regulated. With all other factors equal, a lesser regulatory burden will mean a greater net income.

The New York law allows utilities to establish wholly-owned subsidiaries for the purpose of owning and operating qualifying facilities.³⁸⁷ The subsidiary is required to conduct its operations completely separately from the parent company³⁸⁸ and the utility is not

378. MONT. CODE ANN. §§ 85-1-501, 85-1-513 (1981).

379. N.Y. PUB. SERV. LAW § 66-c(2) (McKinney Supp. 1983).

380. The New York statute provides in part:

Notwithstanding any other provisions of law, any gas, electric, or steam corporation shall . . . be authorized to establish . . . a subsidiary corporation, which corporation shall have as its sole purpose the ownership and/or operation, in whole or in part, of one or more cogeneration, small hydro or alternate energy production facilities.

Id.

381. 18 C.F.R. § 292.206(b) (1982). Even though utilities may still become involved in qualifying facilities subject to the 50% limit, joint ownership of cogeneration or small power production facilities is not likely. RPA COGENERATION REPORT, *supra* note 5, at 2.17.

382. MONT. CODE ANN. §§ 85-1-501, 81-1-513 (1981).

383. *Id.* § 85-1-502.

384. *Id.* § 85-1-503.

385. *Id.* §§ 85-1-504, 85-1-505.

386. *Id.* § 85-1-506.

387. N.Y. PUB. SERV. LAW §§ 66-c(2), 66-c(3) (McKinney Supp. 1983). *See supra* note 380.

388. *Id.* § 66-c(3)(a)(2).

allowed to include the operation and assets of the subsidiary in its rate base.³⁸⁹ Whether or not the utility may include the assets of a subsidiary cogenerator or small power production facility in its rate base, ownership of such a facility could mean financial benefit for the utility. Qualifying facilities are exempted from regulation, so some of the management burden is reduced. Furthermore, a utility can negotiate with its subsidiary to pay a lower rate than the rate that a qualifying facility owned by another party might accept.³⁹⁰ Of course, this discussion assumes that cogeneration and small power production of electricity *can* be profitable. Eliminating ownership requirements for qualifying facilities would allow interested utilities to venture into this area of electric power generation.

Despite the restrictions that are still placed upon the utilities, the New York and Montana statutes have taken a step toward encouraging the active participation of electric utilities in the development of cogeneration and small power production.³⁹¹ This step and others may be necessary in order for cogeneration and small power production to gain a strong foothold.³⁹² Legislative measures which provide incentives for utility participation in cogeneration and small power development may spur the development of new generation capacity using renewable resources. The following section discusses various approaches in detail.

C. Legislative Proposals

The provisions of PURPA, and of most state mini-PURPA's subsequently enacted, focus on incentives to industrial cogenerators and

389. *Id.* § 66-c(3)(c).

Inclusion of the assets and expenses of a facility in the utilities' rate base would increase the rate base, and ultimately increase the rates allowed because a utility is typically allowed to earn a regulated rate-of-return which is calculated as a percentage of its rate base. *See generally* P. GARFIELD, *supra* note 10, at 56-58; A. KAHN, *supra* note 11, at 35-41. It is not clear from the Montana statute whether involvement in this type of project by a utility would affect the utility's rate base.

390. The FERC regulations do not preclude utilities and qualifying facilities from negotiating their own agreement, 18 C.F.R. § 292.301(b)(1) (1982). In actual practice, this type of negotiation is the most commonly used means for reaching agreement, since qualifying facilities do not want the delay and expense of going through the public utility commission in order to reach an agreement with the utility. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, February 15, 1983. Telephone interview with Thomas R. Morton, Vice-President, Windfarms, Ltd., February 27, 1983.

391. This step has been suggested by writers in the field. *See* RPA COGENERATION REPORT, *supra* note 5, at 2.17-18.

392. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, October 7, 1982.

developers of alternate energy sources. Since cogenerators and small power producers may not sell their power directly to the public,³⁹³ cooperation of electric utilities is a necessary adjunct to cogeneration and small power development. Many utilities have resisted attempts to enlist their support in the development of small power facilities.³⁹⁴ Thus, legislation which provides incentives for *utilities* to aid in developing efficient and alternate-energy-fueled electric power generation should be considered.

Proposed incentives for gaining utility cooperation have included changing the ownership requirements for qualifying facilities under PURPA, allowing electric utilities an increase in their rate-of-return based on electric power purchased from qualifying facilities, extending the energy tax credit to utilities, or allowing utilities other tax benefits currently accorded commercial and industrial corporations.

1. Less Restrictive Ownership Requirements

The first proposed incentive involves changing the ownership requirements for qualification under PURPA.³⁹⁵ The standard as promulgated by the Federal Energy Regulatory Commission restricts utility ownership of a cogeneration or small power production facility to less than fifty percent in order for the facility to qualify for exemption from regulation or for the interconnection and rate-setting standards under PURPA.³⁹⁶ This approach has been adopted by Montana and New York.³⁹⁷ Several reasons have been advanced for allowing utilities to participate in cogeneration and small power production: (a) utilities are more familiar with the operation of generating plants; (b) utilities have extensive experience in dealing with federal and state legislation concerning energy development, such as PURPA, the Powerplant and Industrial Fuel Use Act, and the National Gas Policy Act; (c) utilities can generally purchase fuels at lower costs than industrial cogenerators because they buy in larger quantities; and (d) utilities often have a lower return on investment than most industrial corporations, and therefore can more easi-

393. PURPA § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981).

394. Jones, *supra* note 168, at 336.

395. Proposals to allow utilities to own greater than 50% equity interest in a qualifying facility have been proposed by several writers. See, e.g., RPA COGENERATION REPORT, *supra* note 5, at 2.17.

396. 18 C.F.R. § 292.206(b) (1982).

397. See *supra* text and notes at notes 378-89 for discussion of the New York and Montana statutes.

ly make money from a cogeneration or small power producing facility than could a corporation in another industry.³⁹⁸

Some proponents of small power facilities have noted drawbacks to allowing utility ownership of qualifying facilities.³⁹⁹ For example, utilities might use less stringent ownership criteria to gain control over the development of alternative energy power production facilities and then limit the amount of small power development.⁴⁰⁰ Another concern is that utilities might exploit the unregulated aspect of qualifying facilities by channelling utility assets into an entity whose rate-of-return would not be regulated.⁴⁰¹

For this proposal, the advantages seem to outweigh the drawbacks. One purpose of PURPA was to encourage the production of electric power by renewable resources. To the extent that utilities would develop small power production facilities they would be furthering the aims of PURPA. Even though utilities might develop unregulated subsidiaries, the overall size of each facility is still subject to limitation in order for the facility to be exempted from regulation.⁴⁰² Furthermore, under PURPA, a qualifying facility must sell to a utility and not to retail customers,⁴⁰³ so that power produced by any qualifying facility which is sold to a utility will be subject to rate regulation to the extent that a utility's rates are always subject to regulation by a state public utility commission. On balance, the public benefits from the decreased dependence on fossil fuels seem to outweigh any harm that might result from the ownership of qualifying facilities by utilities.

2. Increased Rate-of-Return

A second approach would allow utilities an increased rate-of-return for the amount of electric power purchased by the utility from a qualifying facility.⁴⁰⁴ The allowance of an increased rate-of-return

398. RPA COGENERATION REPORT, *supra* note 5, at 2.17-2.18.

399. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, October 7, 1982.

400. *Id.* Proponents of alternate energy technology have expressed concern over potential control of such technology by utilities. This concern is based on the belief that utilities might use their position as a major supplier of power to buy up the rights to alternate energy technology and then stifle its use, either purposefully or only as a matter of promoting other technologies. See generally Lawrence and Minan, *The Competitive Aspects of Utility Participation in Solar Development*, 11 LAND USE & ENV'T L. REV. 175, 204-14 (1980).

401. Interview with Jeffrey Bernstein, Esq., Bernstein & Smick, Boston, October 7, 1982.

402. PURPA § 210(e), 16 U.S.C. § 824a-3(e) (Supp. V 1981).

403. *Id.* § 210(a), 16 U.S.C. § 824a-3(a) (Supp. V 1981).

404. Although this approach has been suggested, no state has enacted legislation allowing such an increased rate-of-return.

would mean that a utility could make more money on power purchased from a cogenerator or small power producer than on power purchased from another utility.⁴⁰⁵ This incentive would mean that a utility which had to purchase power would be more likely to do so from a qualifying facility, and would be more likely to enter into a long term arrangement with a qualifying facility for the purchase of power.⁴⁰⁶

There are several drawbacks to allowing an increased rate-of-return based on power purchased from a qualifying facility. First, any utility currently possessing sufficient or excess capacity would have no incentive to enter into an agreement with a qualifying facility unless the rate payable to the qualifying facility would be approximately equal to the utility's own cost of producing electricity.⁴⁰⁷ Second, this incentive could result in higher overall costs to the electric consumers because of the increased rate-of-return allowed the utility.⁴⁰⁸ Finally, it can be argued that this incentive merely allows a utility to gain added, and perhaps unjust, benefit from the purchase of electricity from a qualifying facility when the PURPA standards have already allowed for sufficient benefit to a utility for such purchases.⁴⁰⁹

Allowing the utilities an increased rate-of-return would probably cause more controversy than other possible incentives for utilities if the general public perceives that higher costs would merely be passed on to the consumer. Consequently, this incentive is probably not likely to be enacted. Where a utility currently purchases power

405. See generally P. GARFIELD, *supra* note 10, at 116, for a discussion of the rate-of-return concept in public utility economics.

406. It is assumed that the increased rate of return would be sufficiently large to offset any price differential between the rate for power paid by a utility to another utility and the rate paid to a qualifying facility. Two utilities engaged in an electric power sale will often adopt a "split-the-savings" approach for determining the rate payable. Under that approach, the purchasing utility pays a rate halfway between its own cost of production and the selling utility's cost of generation. 45 Fed. Reg. 12,222 (1982). If the rate for power payable to a qualifying facility, as set by a state public utility commission, is significantly greater than the rate determined by the split-the-savings approach, then the utility may not be willing to purchase power from the qualifying facility even with the increased rate of return.

407. See *supra* note 406.

408. The increased rate of return allowed to the utility must come from increased revenues for a given rate base. See *supra* text and notes at notes 325-26. See generally P. GARFIELD, *supra* note 10, at 114-19.

409. The intent of Congress in passing PURPA § 210 was that the utilities' interests would be protected by setting the rate for qualifying facility power at the lower of "just and reasonable and in the public interest" or the incremental rate. CONFERENCE REPORT, *supra* note 15, at 7832. The "incremental rate" is discussed *supra* note 128.

from another utility, however, this alternative should be considered as a means of decreasing fossil fuel dependence.

3. Tax Incentives

A third area of incentives has focused on tax deductions⁴¹⁰ or tax credits⁴¹¹ for utilities.⁴¹² Proposed incentives for utility participation in cogeneration and small power production include extending the energy tax credit to utilities,⁴¹³ or allowing utilities a twenty percent investment tax credit for investing in more efficient or renewable-resource powered generation equipment.⁴¹⁴ A discussion of tax credits or other tax incentives must include consideration of the "flow-through" effect of tax savings upon utilities.⁴¹⁵ The cost of service to the consumer is based upon operating, depreciation, and tax expenses, plus a return on capital investment.⁴¹⁶ If a utility's tax liability is decreased, the cost of service goes down, and the utility's revenues likewise decrease.⁴¹⁷ Thus, a utility may have little or no incentive to employ measures resulting in a tax deduction or credit if any tax savings will merely flow through to the consumers.⁴¹⁸

The business energy tax credit presently allows businesses to deduct from their tax liability up to fifteen percent of the value of

410. A tax deduction reduces gross income and therefore reduces the amount of income upon which a tax is calculated.

411. A tax credit is a reduction of the tax liability or the amount of the tax due. The credit reduces taxes owed on a dollar-for-dollar basis.

412. See generally RPA COGENERATION REPORT, *supra* note 5, at 2.3-2.17; Friedmann, *supra* note 324, at 484.

413. See, e.g., RPA COGENERATION REPORT, *supra* note 5, at 2.13-17. Businesses may take an energy tax credit for investment in "energy property" (which includes electric power generation equipment using cogeneration techniques or renewable resources) of up to 10 percent of the value of the investment. I.R.C. § 48(l) (Supp. IV 1980). However, utilities may not make use of this tax credit. *Id.* § 48(l)(17).

414. RPA COGENERATION REPORT, *supra* note 5, at 2.17. Utilities are presently allowed to take a 10% investment tax credit for new capital investments, which would include new generating equipment, I.R.C. § 48(a)(1)(B)(i) (Supp. IV 1980).

415. A. KAHN, *supra* note 11, at 33-34; see generally P. GARFIELD, *supra* note 10, at 44.

416. P. GARFIELD, *supra* note 10, at 44.

417. See *id.*

418. See A. KAHN, *supra* note 11, at 33-34. A tax deduction may sometimes be merely a tax deferral, such as when a company taking accelerated depreciation in the early years of the equipment's lifetime must subsequently take a proportionately smaller amount in later years. *Id.* Regulatory commissions are not in agreement whether to pass on the benefits of accelerated depreciation to consumers, or to "normalize" the amount of the taxes due, and allow the utility an interest-free loan of the money. *Id.* To the extent that a commission requires the utility to pass along any savings from deferred taxes, the utility will recognize no benefit from the deduction or credit. *Id.*

energy equipment using renewable resources.⁴¹⁹ Public utilities, however, are specifically excluded from the use of this credit.⁴²⁰ It has been suggested that the credit be extended to utilities, since they are the entities most capable of collecting energy from alternate resources and distributing it to a large number of persons.⁴²¹ Furthermore, any utility needing to upgrade its capacity would find the fifteen percent tax credit a major incentive for developing generation capacity using renewable resources.⁴²² Some states allow businesses an energy tax credit for alternate energy equipment,⁴²³ but utilities are also excluded from some of those state provisions.⁴²⁴

Modification of normal public utility commission treatment of tax savings to utilities may be helpful in encouraging utilities to invest in renewable resource energy equipment. Any utility might, however, consider the development of a qualifying facility if business energy tax credits were applicable to public utilities. To disallow the credit for the one industry most likely to develop energy capacity seems to be shortsighted. Energy tax credits, whether on a state or federal level, should be allowed for utilities, as an alternative means of achieving the PURPA goals.

A proposed incentive similar to the energy tax credit is the investment tax credit.⁴²⁵ Non-oil or gas-fired cogenerators are presently allowed an investment tax credit totalling twenty percent of the capital investment.⁴²⁶ A utility investing in the same equipment, however, is only allowed a ten percent credit.⁴²⁷ Utilities would seem to be a prime target for a tax credit aimed at the development of electric power generation using renewable fuels. Federal and state tax incentives designed to encourage alternate energy development could logically be extended to utilities. Furthermore, utilities could

419. I.R.C. § 48(l)(3)(A) (Supp. IV 1980).

420. *Id.* § 48(l)(17).

421. Friedmann, *supra* note 324, at 502-03.

422. The energy tax credit is subtracted directly from tax liability. I.R.C. §§ 38(a), 48(l)(1) (Supp. IV 1980). To the extent that this tax credit exceeds any other available investment credit, *see supra* note 414, a utility might be interested in developing generating capacity using renewable resources.

423. *See, e.g.*, MASS. GEN. LAWS ANN. ch. 63 § 38H (West Supp. 1983); CAL. REV. & T. CODE § 17226 (West 1983).

424. For example, MASS. GEN. LAWS ANN. ch. 63 § 38H (West Supp. 1983) applies only to "business corporations", which definition does not include public utilities.

425. *See supra* note 414.

426. I.R.C. § 48(l)(14) (Supp. IV 1980). This is the combination of a 10% investment tax credit, *id.* § 48(l) and a 10% energy tax credit, *id.* § 48(l).

427. *See supra* notes 413-14.

gain an additional incentive for investing in such tax-saving measures if state public utility commissions were to allow those utilities to benefit, at least partially, from any tax savings.

All of the incentives mentioned above — allowing utilities to own qualifying cogeneration and small power production facilities, allowing utilities an increased rate-of-return for power purchased from a qualifying facility, or allowing utilities to take tax credits for investments in generating equipment using renewable resources — are consistent with the goals of decreased dependence on fossil fuels and increased reliance on renewable resources. Although the establishment of such incentives could result in higher costs to the consumer for electric power, each of these incentives should be considered both by federal and by state governments. Particularly with regard to ownership limitations on qualifying facilities and rate-of-return adjustments for power produced by renewable resources, the states are in a better position to enact such incentives because the states and state agencies are most directly concerned with these issues on a day-to-day basis.⁴²⁸ Since most of the tax incentives are based on federal income taxes, federal legislative changes will have more impact than state proposals. State public utility commissions, however, can enhance any tax incentives by allowing utilities to retain tax benefits.

VII. CONCLUSION

Decreased dependence on fossil fuels and increased efficiency in the production of electricity — two goals of the National Energy Act — are very desirable achievements. The provisions of PURPA attempt to reach those goals by encouraging electric energy generation that is more efficient than the current industry standard, and by encouraging the use of renewable resources for electric energy production. These provisions established policies and standards that would not have been established so quickly on a state-by-state basis. The PURPA provisions and FERC regulations promulgated thereunder, however, cannot solve all of the problems that arise in moving toward increased energy efficiency and decreased fossil fuel dependence.

PURPA upset the status quo of utility regulation, and opposition to the federal policy by utilities has continued. Utilities have challenged the imposition of federal standards upon state agencies; the

428. See *supra* text and notes at notes 49-51.

federal regulations for implementing PURPA are not completely settled. An important federal policy has become bogged down in the practicalities of implementation. In analyzing PURPA and in considering possible resolution of federal/state conflicts, public utility commission authority under federal or state law, or encouragement of utility participation in the implementation of PURPA, one factor must be remembered at all times: the preponderance of utility regulation has been, and continues to be, exercised at the state level. Therefore, resolution of those issues should be considered at the state level, where authority can clearly be delegated to the state agencies which have regular contact with the utility industry. It is those state agencies — public utility commissions — which, if given enough authority, can most effectively implement the development of power by qualifying facilities. In addition, cooperation by electric utilities will be more readily gained if the utilities are offered some benefits over the long run which are linked to their assistance and cooperation in implementing the goals of PURPA.